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# ***ELECTRICAL MANUAL – 2010 LIGHT DUTY FULL SIZE C/K TRUCKS***

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## **Overview**

### **BODY CONTROL SYSTEM DESCRIPTION AND OPERATION**

The body control system consists of the Body Control Module (BCM), communications, and various input and outputs. Some inputs, outputs and messages require other modules to interact with the BCM. The BCM also has discrete input and output terminals to control the vehicle's body functions. The BCM is wired to the GMLAN high speed serial data buss and the GMLAN low speed serial data buss and acts as a gateway between them. If the BCM does not communicate the vehicle will not start due to the inability of the Engine Control Module (ECM)/ Powertrain Control Module (PCM) and Theft Deterrent Module (TDM) to communicate without the BCM providing the gateway function.

### **POWER MODE MASTER**

This vehicles BCM functions as the Power Mode Master (PMM). The ignition switch is a low current switch with multiple discrete ignition switch signals to the PMM for determination the power mode that will be sent over the serial data circuits to the other modules that need this information, and so the PMM will activate relays and other direct outputs of the PMM as needed.

### **SERIAL DATA GATEWAY**

The BCM in this vehicle functions as a gateway or translator. The purpose of the gateway is to translate serial data messages between the GMLAN high speed buss and the GMLAN low speed buss for communication between the various modules. The gateway will interact with each network according to that network's transmission protocol.

One example of this necessary communication is the communication between the ECM/PCM which is high speed serial data and TDM which is low speed serial data. If these modules can not exchange information, the vehicle will not start.

Communication between the BCM and a scan tool can be on the high speed GMLAN network or low speed GMLAN network. If one network is lost, the BCM can still communicate with the scan tool. A lost communication Diagnostic Trouble Code (DTC) typically is set in modules other than the module with a communication failure.

## **Overview (cont'd)**

### **BODY CONTROL MODULE**

The various body control module (BCM) input and output circuits are described in the corresponding functional areas indicated on the BCM electrical schematics. Some BCM functions with the subsystems may be as a gateway only or as an enable for the system. The BCM related systems/subsystems include, but are not limited to the following:

- Antilock Brake System (ABS)
- Automatic Day-Night Mirror
- Cruise Control System
- Electric Power Management (EPM)
- Exterior Lighting--Refer to
- Horn System
- HVAC
- Instrument Cluster Indicator Control
- Interior Lighting
- Power Door Lock System
- Rear Window Defogger System
- Redundant Steering Wheel Controls
- Remote Function Actuation (RFA) Control
- Retained Accessory Power (RAP)
- Shift Lock Control System
- Starting System
- Supplemental Inflatable Restraint (SIR) System
- Theft Deterrent
- Tire Pressure Monitor (TPM) System
- Wiper/Washer System Functions

## DataLink Communications Description and Operation

### **CIRCUIT DESCRIPTION**

The communication among control modules is performed through the high speed GMLAN serial data circuits and the low speed GMLAN serial data circuit. The modules that need real time communication are attached to the High Speed GMLAN network. The Body Control Module (BCM) is the gateway between the high and low speed networks. Refer to ***Body Control System Description and Operation*** for more information about the gateway.

Signal supervision is the process of determining whether an expected signal is being received or not. Some messages are sent on a periodic basis and are interpreted as a heartbeat of a device. If such a signal is lost, the signal supervision part of the software will set a no communication DTC (U. code) against the missing device. This code is mapped on the Tech 2 screen as a code against the physical device. A lost communication DTC typically is set in modules other than the module with a communication failure.

### **GMLAN HIGH-SPEED CIRCUIT DESCRIPTION**

The Data Link Connector (DLC) allows a scan tool to communicate with the high speed GMLAN serial data circuit. The serial data is transmitted on 2 twisted wires that allow speed up to 500 Kb/s. The twisted pair is terminated with two 120-ohm resistors, one is internal to the Engine Control Module (ECM) and the other is after the Electronic Brake Control Module (EBCM), or if equipped, the suspension control module. The high speed GMLAN is a differential bus. The high speed GMLAN serial data bus (+) and high speed GMLAN serial data (-) are driven to opposite extremes from a rest or idle level. The idle level, which is approximately 2.5 volts, is considered recessive transmitted data and is interpreted as a logic 1. Driving the lines to their extremes, adds 1 volt to the high speed GMLAN serial data bus (+) and subtracts 1 volt from the high speed GMLAN serial data bus (-) wire. If a communication signal is lost, the application will set a no communication code against the respective control module. This code is mapped on the Tech 2 screen as a code against the physical device. Note: a loss of serial data DTC does not represent a failure of the module that the code is set in. The high speed GMLAN serial data allows communication between the BCM, ECM, Transmission Control Module (TCM), Vehicle Communication Interface Module (VCIM), 4WD control module, EBCM, and the suspension control module depending on RPO.

## **DataLink Communications Description and Operation (cont'd)**

### **GMLAN LOW-SPEED CIRCUIT DESCRIPTION**

The Data Link Connector (DLC) allows a scan tool to communicate with the low speed GMLAN serial data circuit. The serial data is transmitted over a single wire to the appropriate control modules. Under normal vehicle operating conditions, the speed of the buss is 33.33 Kb/s. This protocol produces a simple pulse train sent out over the GMLAN low speed serial data bus. When a module pulls the buss high, 5 volts, this creates a logic state of 0 on the buss. When the buss is pulled low, 0 volts, it is translated as a logic state of 1. To wake the control modules connected to the GMLAN low speed serial data buss, a wake up signal is sent out over the buss. Modules connected to the GMLAN low speed serial data buss can be part of a virtual network as described in GMLAN High Speed Circuit Description above. The modules on the GMLAN low speed serial data buss are connected to the buss using several splice or "star" connectors separating groups of modules. The following list states the splices and modules connected to the low speed serial data circuits:

### **I/P Splice**

- Data Link Connector (DLC), connected only to the Instrument Panel (I/P) splice.
- Amplifier (Amp)
- Rear Seat Audio (RSA) .
- Vehicle Communication Interface Module (VCIM)
- Digital Radio Receiver (DRR)
- Inside Rearview Mirror Module (ISRM), connected through the mid I/P fuse block
- Instrument Panel Cluster (IPC)
- Body Control Module (BCM)
- Theft Deterrent Module (TDM)
- Heater Ventilation and Air Conditioning (HVAC)
- Radio
- Driver Door Switch (DDS), connected through the left I/P fuse block
- Passenger Door Switch (PDS), connected through the right I/P fuse block

## **DataLink Communications Description and Operation (cont'd)**

### **Body Splice**

- Articulating Running Board Module (ARBM)
- Ultrasonic Park Assist (UPA)
- Memory Seat Module (MSM)
- Liftgate Module (LGM)
- Passenger Presence System (PPS)
- Inflatable restraint vehicle Rollover Sensor (ROS)
- Inflatable restraint Sensing and Diagnostic Module (SDM)

### **Serial Data Reference**

The scan tool communicates over the various busses on the vehicle. When a scan tool is installed on a vehicle, the scan tool will try to communicate with every module that could be optioned into the vehicle. If an option is not installed on the vehicle, the scan tool will display No COMM for that options specific control module.

In order to avert misdiagnoses of No Communication with a specific module, refer to **Data Link References** for a list of modules, the busses they communicate with, and the Regular Production Option (RPO) codes for a specific module.

## Electric Power Management – Description and Operation

### Electric Power Management

The Electric Power Management (EPM) is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The EPM system makes the most efficient use of the generator output, improves the battery State Of Charge (SOC), extends battery life.

The idle boost operation is a means of improving generator performance during a low voltage or low battery SOC condition.

Idle boost is activated in incremental steps, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the Body Control Module (BCM) to regulate EPM are outlined below.

| Function           | Battery Temperature Calculation | Battery Voltage Calculation | Amp-hour Calculation                       | Action Taken                              |
|--------------------|---------------------------------|-----------------------------|--------------------------------------------|-------------------------------------------|
| Idle Boost 1 Start | Less Than -15°C (+5°F)          | Less Than 13 V              | --                                         | First Level Idle Boost Requested          |
| Idle Boost 1 Start | --                              | --                          | Battery has a net loss greater than 0.6 AH | First Level Idle Boost Requested          |
| Idle Boost 1 Start | --                              | Less Than 10.9 V            | --                                         | First Level Idle Boost Requested          |
| Idle Boost 1 End   | Greater Than -10°C (+5°F)       | Greater Than 12 V           | Battery has a net loss less than 0.2 AH    | First Level Idle Boost Request Cancelled  |
| Idle Boost 2 Start | --                              | --                          | Battery has a net loss greater than 1.6 AH | Second Level Idle Boost Requested         |
| Idle Boost 2 Start | --                              | Less Than 10.9 V            | --                                         | Second Level Idle Boost Requested         |
| Idle Boost 2 End   | --                              | Greater Than 12 V           | Battery has a net loss less than 0.8 AH    | Second Level Idle Boost Request Cancelled |
| Idle Boost 3 Start | --                              | --                          | Battery has a net loss of 10.0 AH          | Third Level Idle Boost Requested          |
| Idle Boost 3 End   | --                              | Greater Than 12 V           | Battery has a net loss of less than 6 AH   | Third Level Idle Boost Request Cancelled  |

## Power Mode – Description and Operation

### Serial Data Power Mode Master

Power to many of this vehicles circuits is controlled by the module that is designated the Power Mode Master (PMM). This vehicle's PMM is the Body Control Module (BCM). The ignition switch is a low current switch with multiple discrete ignition switch signals to the PMM for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The PMM will also activate relays and other direct outputs of the PMM as needed. The PMM determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the PMM serial data message does not match what the individual module can see from its own connections.

The PMM receives ignition switch signals to identify the operators desired power mode. The PMM Power Mode Parameters table below illustrates the correct state of these input parameters (circuits) in correspondence to the ignition switch position:

| PMM Power Mode Parameters<br>Ignition Switch Position | Power Mode Transmitted | Ignition Off/Run/Crank<br>(Run Crank Ignition 1 Voltage Circuit) | Ignition Accessory/Run<br>(Accessory Voltage Circuit) | Ignition Run/Crank<br>(Ignition 1 Voltage Circuit) |
|-------------------------------------------------------|------------------------|------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------|
| Off Key Out                                           | Off                    | Key Out/ACC                                                      | Inactive                                              | Inactive                                           |
| Off Key In                                            | Off                    | Key In/Off                                                       | Inactive                                              | Inactive                                           |
| Accessory                                             | Accessory              | Key Out/ACC                                                      | Active                                                | Inactive                                           |
| Run                                                   | Run                    | Run                                                              | Active                                                | Active                                             |
| Start                                                 | Crank Request          | Crank                                                            | Inactive                                              | Active                                             |

### Relay Controlled Power Mode

The BCM uses the discrete ignition switch inputs Run/Crank Ignition 1 Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The RAP relay remains on for a timed period after the Ignition key is removed. Refer to ***Retained Accessory Power (RAP) Description and Operation*** for more information on the RAP function.

## **Power Mode – Description and Operation (cont'd)**

### **BCM Awake/Sleep States**

The Body Control Module (BCM) is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if **any** of the following wake-up inputs are detected:

- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when **all** of the following conditions exist:

- The ignition switch is OFF, key out.
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

## Retained Accessory Power (RAP) – Description and Operation

### Serial Data Control of Retained Accessory Power (RAP)

The modules receive the power mode message from the Body Control Module (BCM) over the serial data circuits, indicating when the Retained Accessory Power (RAP) power mode is current. The BCM monitors the ignition switch position, battery condition and passenger compartment doors status to determine whether RAP should be initiated. The modules then support the operation of the systems under their control as required by their RAP power mode operation. Components and systems that are active in RAP are also activated anytime the ignition is any position other than OFF.

The BCM sends a serial data power mode message ending the RAP function when one of the following conditions is met:

- The BCM receives an input indicating the opening of any passenger compartment door after the ignition key is out of the ignition.

**Important: The only door that will turn off the radio during RAP is the driver door.**

**This is a function of the radio and will still turn off after the time limit.**

- The BCM internal timer for the RAP expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

### Relay Control of Retained Accessory Power (RAP)

The BCM keeps the Retained Accessory Power (RAP) relay energized during all power modes, except Off-Awake and Crank. The relay is also energized for approximately 10 minutes after shutting the ignition OFF and removing the key, providing no door is opened. The BCM will de-energize the RAP relay at the same time as the serial data message is sent to end RAP.

The devices powered by the accessory relay during the RAP power mode are the sunroof, power window switches and Brake Transmission Shift Interlock (BTSI)/Park Lock.

## Power Take-Off (PTO) – Bulletin #79

### **Bulletin #79**

The all new PTO Subsystem Factory Options include all components & wiring for a tested functional system (speed control). Two Bulletins are offered to describe the system.

Bulletin #79 provides a brief description

The bulletin shows the location of the following components included with the option:

1. New Driver control switch.
2. New PTO module
3. New 16-way connector for user interface.

The bulletin contains the following sections

1. System Overview
2. Detailed Functional Description
3. Standard vs. Optional Features

The link to Bulletin #79 is

[http://www.gmupfitter.com/publicat/bull/52993\\_UpfitBlltn79\\_D4.pdf](http://www.gmupfitter.com/publicat/bull/52993_UpfitBlltn79_D4.pdf)

***Note: These bulletins address the "All New," not the "Classic" C/K truck.***

## Power Take-Off (PTO) – Bulletin #80 rev 1

**Bulletin #80rev1** Bulletin #80rev1 is a complete Operating Description and Application Guide. The Table of contents is as follows:

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The Link to Bulletin #80rev1 is:

[http://www.gmupfitter.com/publicat/bull/63135\\_PTO\\_Bulletin\\_80\\_D8.pdf](http://www.gmupfitter.com/publicat/bull/63135_PTO_Bulletin_80_D8.pdf)

## Power Take-Off (PTO) – Fast Idle (UF3) Overview

### PTO

Engine rpm is adjusted with an IP mounted activation switch. There are two engine rpm selections available which are preset at the factory. Engine RPM settings and PTO modes can be modified at the dealer with GM Tech tool. PTO price includes Switch, PTO Module, DIC messages, dedicated wiring for easy interface and, power-take-off gear in transmission. PTO access is available on driver side only, (K34 Cruise Control is not required, N/A with UF3 high idle). PTO can't be added later if not ordered.

### PTO Controls Location

The PTO switch is mounted in the right side of the center instrument panel as part of the factory-installed PTO package. The PTO switch is a four position rocker type.



For complete information about this option, see GM Upfitter Bulletin #80re at:  
[http://www.gmupfitter.com/publicat/bull/63135\\_PTO\\_Bulletin\\_80\\_D8.pdf](http://www.gmupfitter.com/publicat/bull/63135_PTO_Bulletin_80_D8.pdf)

### UF3 – Fast Idle

- UF3 is available on some 2008 trucks
- To obtain Fast Idle capability on 2008 trucks, you must order:
  1. 2500/3500 Series – UF3 is not available on 1500 Series trucks
  2. 6.0L (LY6) Gas Engine or 6.6L (LMM) Diesel Engine
  3. Cruise Control Option (K34)
  4. Fast Idle Option (UF3)
- UF3 cannot be retrofitted on 2008 trucks – no kits are available

**For complete information about this option, see GM Upfitter Bulletin #82 at:**

[http://www.gmupfitter.com/publicat/bull/63135\\_FastIdle\\_UI\\_82\\_D3.pdf](http://www.gmupfitter.com/publicat/bull/63135_FastIdle_UI_82_D3.pdf)

## Snowplow/Front Lighting – Prep (VYU) Electrical Provisions

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## Snowplow Prep Package (VYU) Electrical Provisions

### **Emergency Roof-Mounted Lamp Switch**

This provision includes an over head console mounted switch , a relay, and wiring which terminates at the roof as coiled blunt cut wires – Option TRW. There are two blunt cut 12-gauge (3.0 mm2) wires, one is Dark Green (roof-mounted lamp power), it is controlled by the over head console -mounted switch through the relay, the other is Black (ground). The Dark Green power wire is protected by the 30-Amp S/ROOF fuse #33 which is located in the Underhood Electrical Center.

### **VYU Generators**

- On 1500/2500 Series trucks equipped with Gas Engines, the VYU option provides upgrade to a larger 160 amp output generator
- On 2500/3500 Series trucks equipped with Diesel Engines, the VYU option provides upgrade to dual 125 amp generators
- Refer to the Generator Chart on page A-18

### **Accessory Harness Grommet**

Trucks will come equipped with a predrilled 42mm pass-through hole located on the dash panel on the left hand side of the vehicle. The hole will be sealed with a grommet (see Figure 3) which can be used by the upfitter for pass-through wiring. To use the grommet (part# 15336702), the upfitter slices off the tape tab end (in engine compartment) of the grommet and then spreads it open to pass wiring through.

### **Forward Lamp Harness In-Line Connectors**

The turn signals are driven from the BCM. Changes in turn signal current may require the use of additional relays. The Studs on the UBEC can be used for battery power for the relays. This wire requires a separate in-line fuse.

The Chevrolet (X88) and GMC (Z88) utilities have different forward lamps.

- Chevrolet forward lamp wiring harness will have a set of mating eight cavity connectors on both the left and right hand side of the vehicle. The upfitter will be able to disconnect the in-line connectors which will allow interfacing with the forward lamp circuits (Front Parklamp, Turn Signal and DRL). The headlamp circuits may be accessed from the headlamp connectors.
- GMC lamp wiring harness will have a set of mating 3 cavity connectors on both the left and right hand side of the vehicle for Turn Signal and Park Lamps. High and Low beams do not have an in-line connector. The VYU options adds an additional set of mating 3 cavity connectors on both the left and right hand side of the vehicle for High and Low beams.

The Chevrolet (X88) and GMC (Z88) pickups have the same forward lamps.

- These are similar to the Chevrolet utility. The difference is the utilities have a separate Daytime Running Lamp (DRL). The Pickups use a reduced intensity Low Beam Headlamp for DRL. Both the pickups and the Chevrolet utility use the same eight cavity connectors for the forward lamp wiring. The difference is the pickups have no connection for the DRL.

### **Backup Lamp Power Feed**

A backup lamp power feed is provided at the rear of the vehicle through the trailer wiring harness as a standard feature. This circuit is protected by the 10-Amp TRLR B/U fuse which is located in the Under hood Electrical Center. On vehicles with Light Duty Trailer Wiring this circuit can be accessed through the Light Green trailer wire. This wire is located in pin A of the trailer connector at the rear of the vehicle (see figure 6). On vehicles with Heavy Duty Trailer Wiring option, this connector is mated with a socket at the rear of the vehicle (see figure 7).

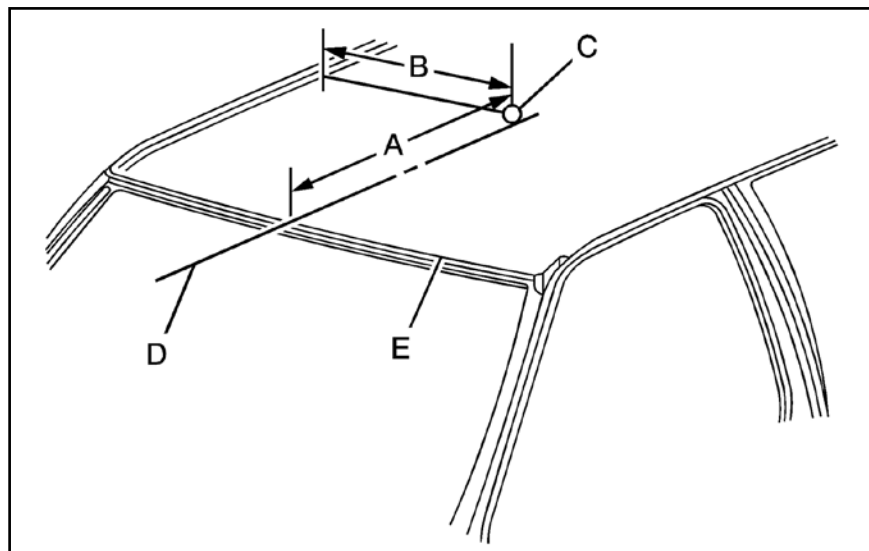
## Roof Mounted Beacon (TRW)

Battery power is supplied through a 30 amp fuse to a wiring harness located in the roof. Power is controlled with a switch located in the overhead console. The customer or vehicle upfitter must complete the installation to an added accessory such as an emergency beacon lamp.

Maximum rated electrical load is 21 amps (250 watts). The added electrical requirements must not exceed 21 amps (250 watts). Running the accessory for long periods of time with the engine off may run the battery down.

### **Installation Instructions – Emergency Vehicle Roof Panel Lamp**

Wiring to the accessory can be done by either directly connecting the wire in the roof to the accessory (Option A) or by using Wiring Harness Package part number 12150250 obtained from GM Service Parts (Option B).



- A. 25.39 inches (645 mm)
- B. 17.32 inches (440 mm)
- C. 3.94 inches (100 mm)
- D. Roof Centerline
- E. Roof Edge

## Roof Mounted Beacon (TRW) (cont'd)

### **Emergency Vehicle Roof Panel Lamp (continued from previous page)**

1. Disconnect the battery negative (-) cable at the battery.
2. Make the electrical connections using either option A or option B.

**Notice:** Pulling the wiring harness through a panel hole that has sharp edges may cause damage to the wire and/or wire insulation. Remove sharp edges from the panel hole before pulling the wire through it.

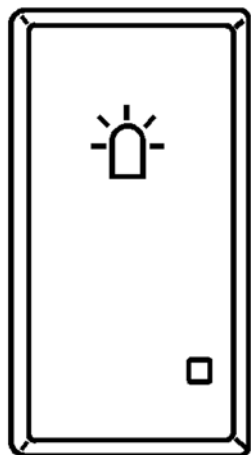
#### **Option A: Roof Wires Directly to Accessory**

1. Drill a 3/8 inch to 1/2 inch (10 to 13 mm) hole in the outer roof panel in the area shown in the illustration. The hole should only go through the outer panel. Remove all sharp edges from the drilled hole.
2. Remove the inside overhead console access panel/lamp lenses.
3. The accessory harness is coil tied to the passenger's side of the vehicle at the console inner bracket.
4. Cut the tape holding the harness coil.
5. As one person watches the roof hole from the outside for the end of the harness, a second person from the inside of the vehicle should snake the harness toward the hole.
6. Pull out the wiring harness being careful to avoid scraping the insulation on the edge of the hole.
7. Extend the wiring harness to the accessory.
8. Connect the dark green wire to the accessory hot terminal.
9. Connect the black wire to the accessory ground terminal.
10. Cover the hole in the roof with a durable sealant such as silicone rubber sealer.
11. Reinstall the overhead console access panel/lamp lenses.

#### **Option B: Use Wiring Harness Package 12150250. Obtain from GM Service Parts through the GM Dealership**

1. Drill a 1.25 inch (32 mm) hole in the outer roof panel in the area shown in the illustration. The hole should only go through the outer panel. Remove all sharp edges from the drilled hole.
2. Remove the inside overhead console access panel/lamp lenses.
3. The accessory harness is coil tied to the passenger's side of the vehicle at the console inner bracket.
4. Cut the tape holding the harness coil.
5. As one person watches the roof hole from the outside for the end of the harness, a second person from the inside of the vehicle should snake the harness toward the hole.
6. Pull out the wiring harness being careful to avoid scraping the insulation on the edge of the hole.
7. Cut the wire to length. Install terminals to wire ends and insert into the connector. The brown wire goes to cavity A and the black wire in cavity B. Push in the secondary lock to retain the wires.
8. Attach the harness assembly from the package to the accessory. Cover with the supplied conduit for added protection. Connect the orange wire to the accessory hot terminal and the black wire to the ground.
9. Complete the connection from the roof harness to the extension harness. Cover the mated connector with the supplied foam. Push the foam covered connection and excess wire through the roof panel hole.
10. Reinstall the overhead console access panel/lamp lenses.

## Roof Mounted Beacon (TRW) – Restoring Power



The auxiliary lamp switch is located on the overhead console.

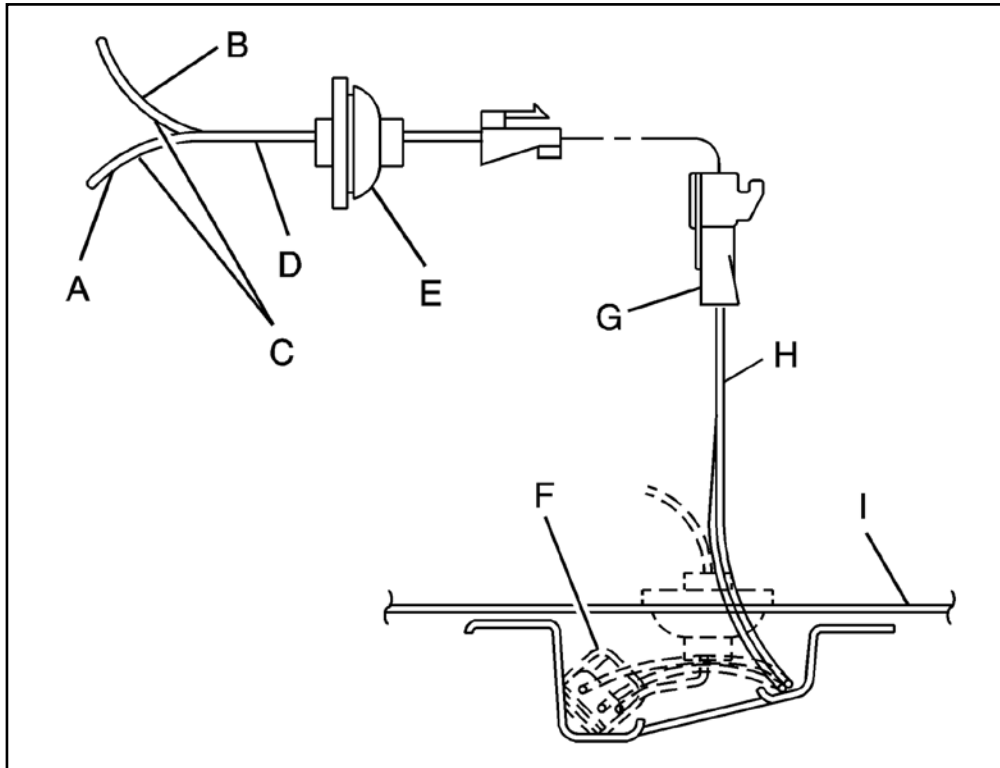
This switch includes wiring provisions for a dealer or a qualified service center to install an auxiliary roof lamp. When the wiring is connected to an auxiliary roof mounted lamp, pressing the bottom of the switch will activate the lamp and illuminate an indicator light at the bottom of the switch. Pressing the top of the switch again will turn off the roof mounted lamp and indicator.

1. Be sure that the auxiliary lamp switch is off.
2. Reconnect the battery negative cable.
3. Turn the auxiliary lamp switch on. The accessory should now be working. If it is not working, check the connections.
4. After ensuring that the accessory is working properly, install the grommet in the hole. Seal with silicone sealer to prevent water leakage.

**Notice:** Overloading the vehicle's electrical system may damage your vehicle's accessories.  
Do not overload the vehicle's system by having unnecessary accessories on at the same time.

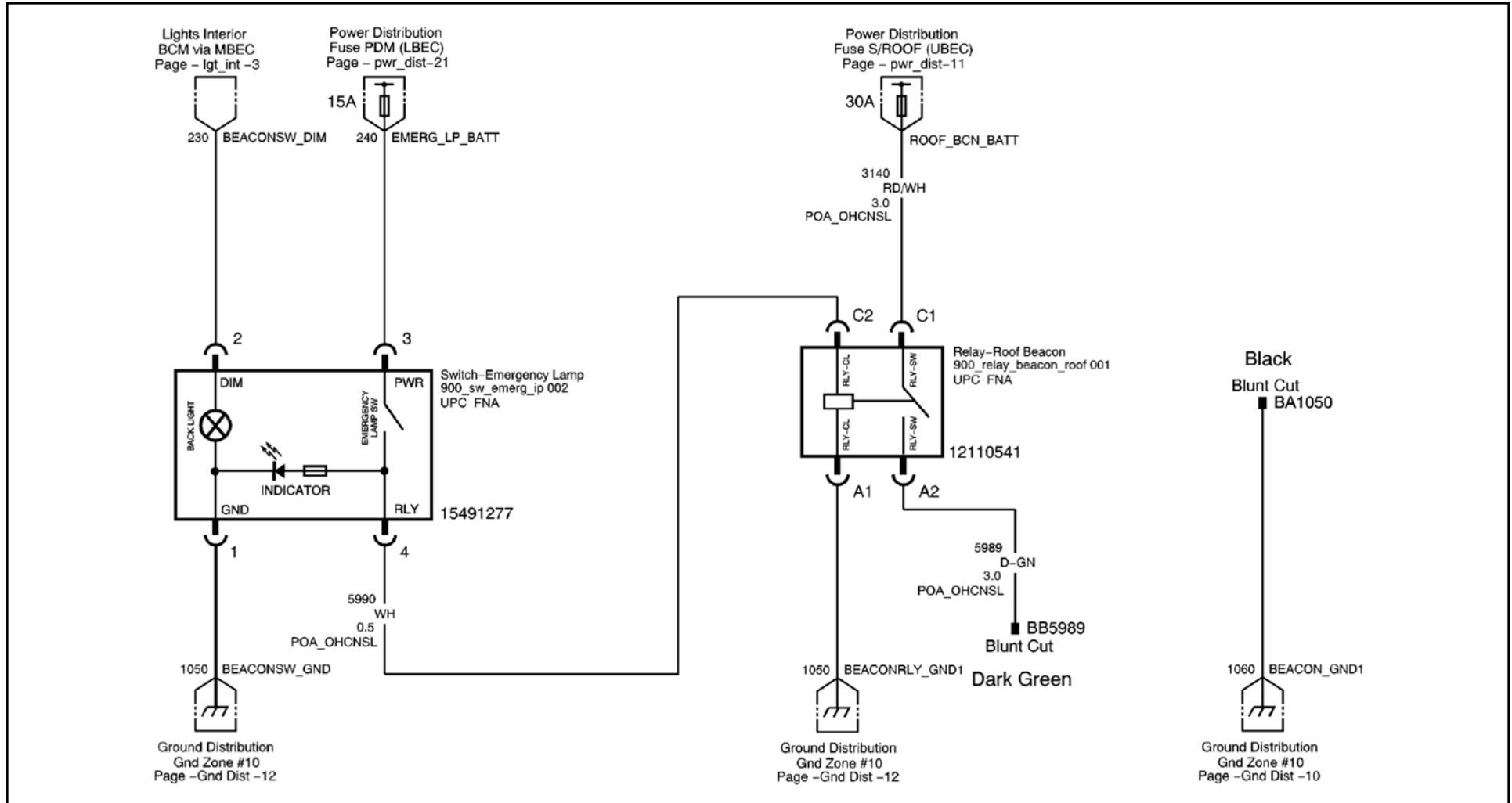
## Roof Mounted Beacon (TRW)

### Option B



- A. Black Wire
- B. Orange Wire
- C. To Roof Mounted Lamp
- D. Harness Assembly
- E. Grommet (Roof)
- F. Foam Insulator (Adhesive-Backed)
- G. Harness Connector, Secondary Lock and Terminal
- H. Brown Black Wire
- I. Vehicle Outer Roof Panel

## Roof Mounted Beacon (TRW)



## Maintenance

The circuit is fed from the #2 post on the underhood electrical center and protected by the fuse labeled #2 post located in the electrical center. Always replace the fuse with a 30 amp maxi-fuse.

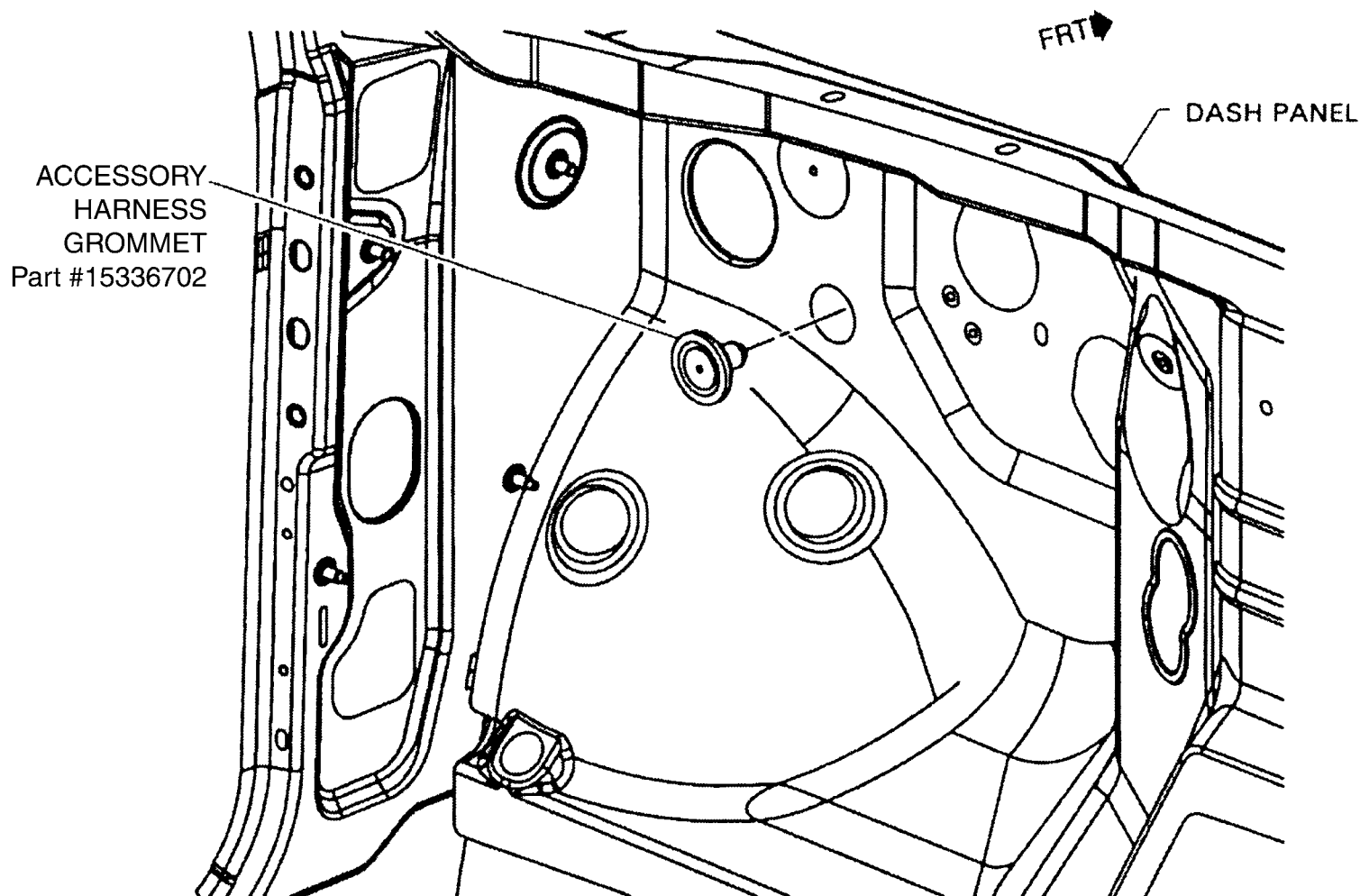
## Generator Usage

| Vehicle Type         | Vehicle Series | Options and/or Special Equipment | Engine Cooling Fans | Engine Type | Generator RPO/Make/Model | Generator Output (Amps) |
|----------------------|----------------|----------------------------------|---------------------|-------------|--------------------------|-------------------------|
| Utility – Light Duty | 10             | Base                             | Dual Electric       | Gas         | KW1 / Remy / DR44M       | 160                     |
| Utility – Heavy Duty | 20             | Base                             | Engine Driven       | Gas         | KG3 / Remy / DR44M       | 145                     |
|                      | 20             | VYU – Snow Plow                  | Engine Driven       | Gas         | KW1 / Remy / DR44M       | 160                     |
| Pickup – Light Duty  | 10             | Base                             | Dual Electric       | Gas         | KG3 / Remy / DR44M       | 145                     |
|                      | 10             | VYU – Snow plow                  | Dual Electric       | Gas         | KW1 / Remy / DR44M       | 160                     |
| Pickup – Heavy Duty  | 20/30          | Base                             | Engine Driven       | Gas/Diesel  | KG7 / Bosch / E6         | 125                     |
|                      | 20/30          | VYU – Snow Plow                  | Engine Driven       | Gas         | KW1 / Remy / DR44M       | 160                     |
|                      | 20/30          | VYU – Snow Plow                  | Engine Driven       | Diesel      | K76 / Bosch / E6 X 2     | 125 X 2 = 250           |
|                      | 20/30          | K76 – Dual Generators            | Engine Driven       | Diesel      | K76 / Bosch / E6 X 2     | 125 X 2 = 250           |

### Generator RPO's

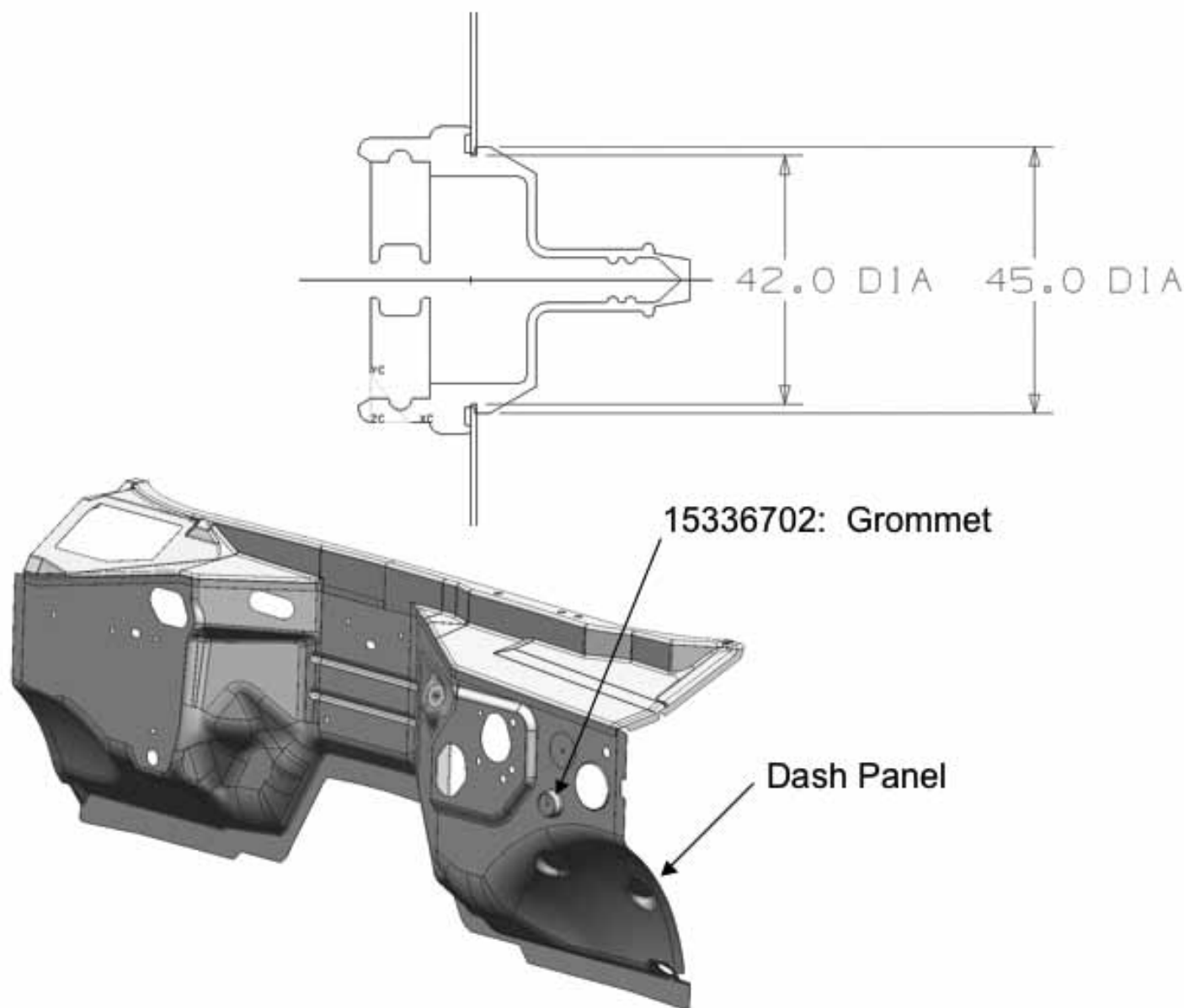
- 125 Amp      KG7
- 145 Amp      KG3
- 160 Amp      KW1
- 125 Amp X 2      K76

## Accessory Harness Grommet



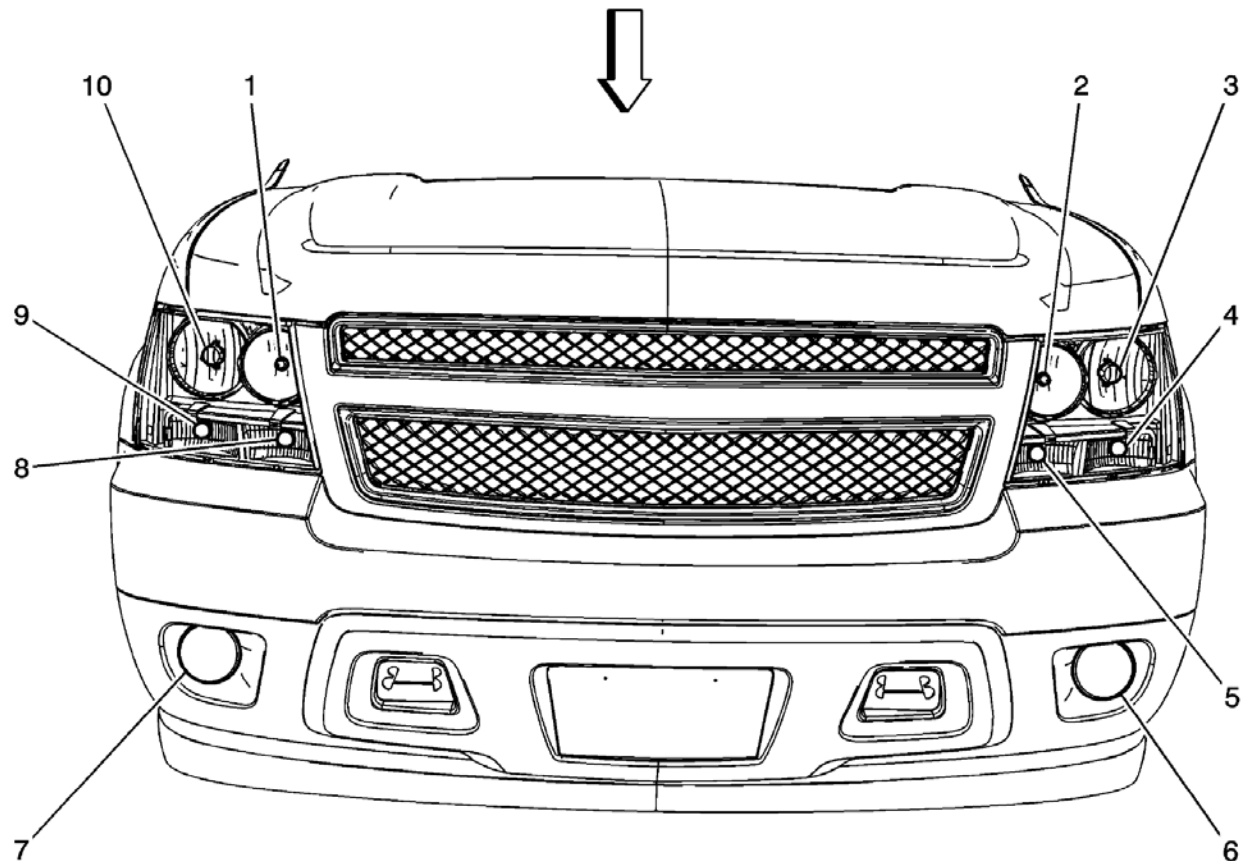
**ACCESSORY HARNESS GROMMET**

## **VYU Hole Location**



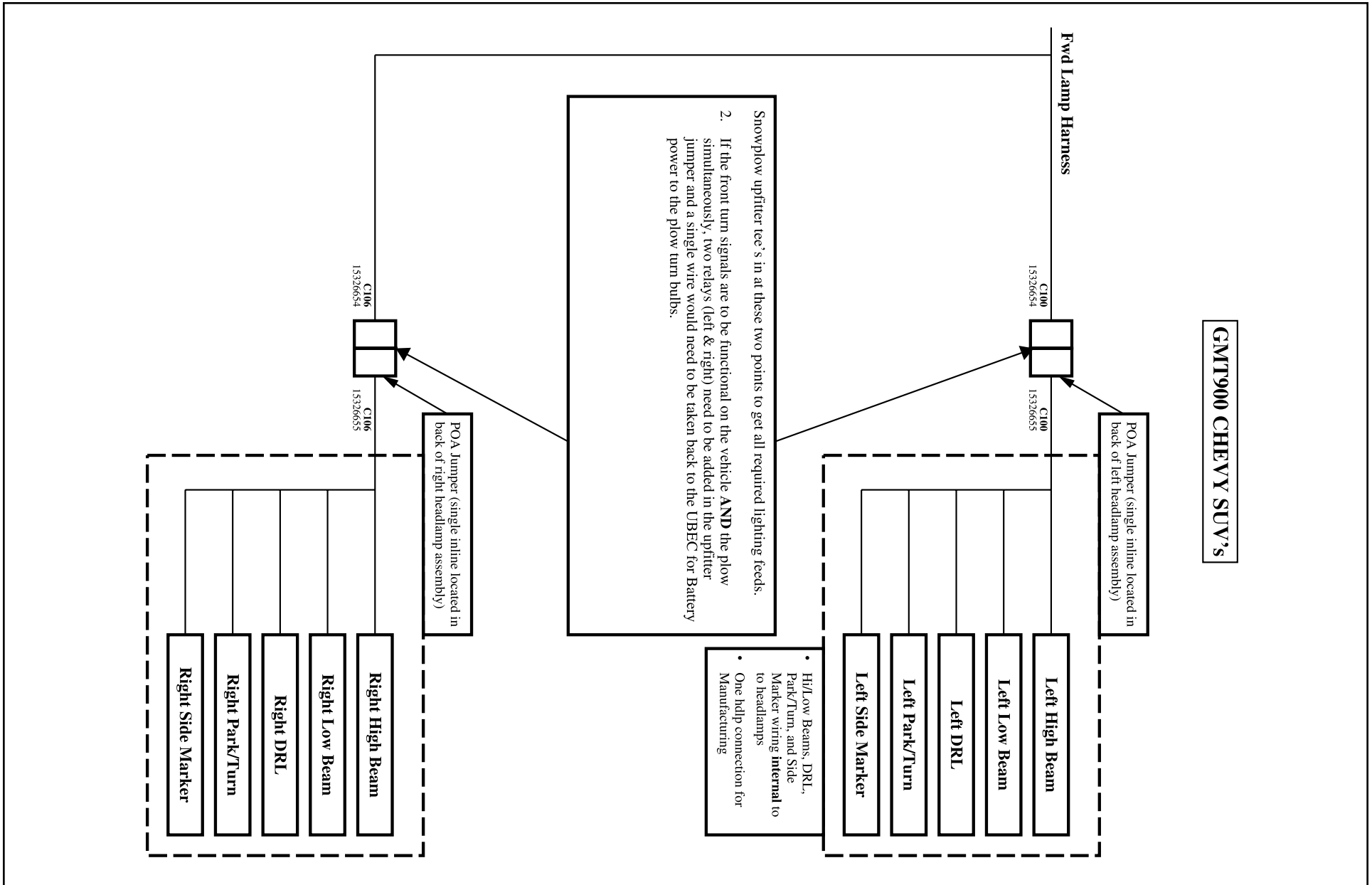
## Chevrolet Tahoe SUV (X88)

Front of the Vehicle (X88)

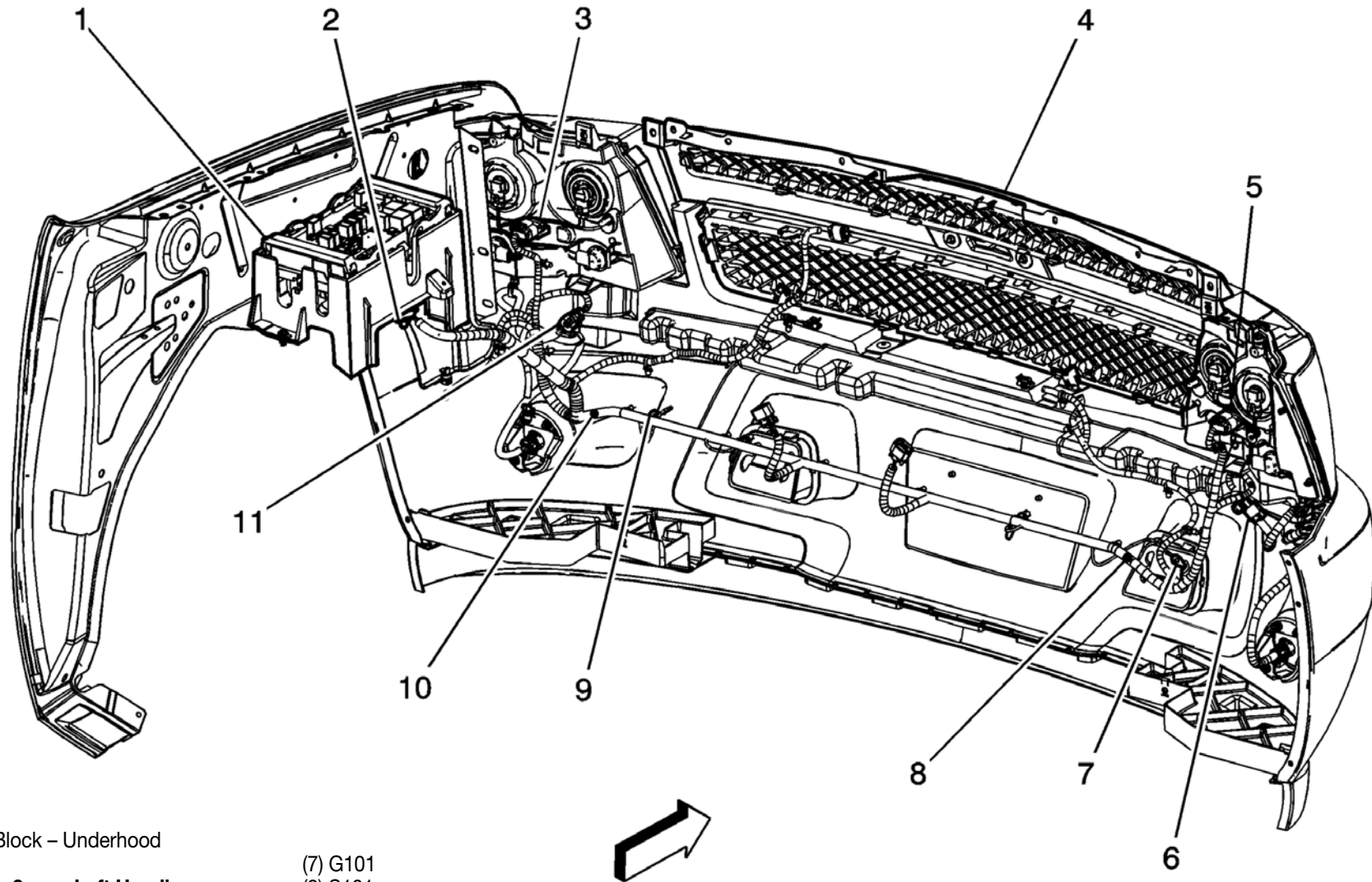


- 1. Headlamp - High Beam - Right
- 2. Headlamp - High Beam - Left
- 3. Headlamp - Left
- 4. Park/Turn Signal Lamp - Left
- 5. Daytime Running Lamp (DRL) - Left
- 6. Fog Lamp - LF
- 7. Fog Lamp - RF
- 8. Daytime Running Lamp (DRL) - Right
- 9. Park/Turn Signal Lamp - Right
- 10. Headlamp - Right

## Forward Lighting & Additional Turn Signals – Chevrolet Tahoe & Suburban (X88)



## Front Fascia Harnesses Chevrolet Tahoe (X88)



- (1) Fuse Block – Underhood
- (2) C103
- (3) X100 – 8-way Left Headlamp
- (4) Grill
- (5) X106 – 8-way Right Headlamp
- (6) C105 (T96)

- (7) G101
- (8) S101
- (9) G100
- (10) S100
- (11) C102 (T96)

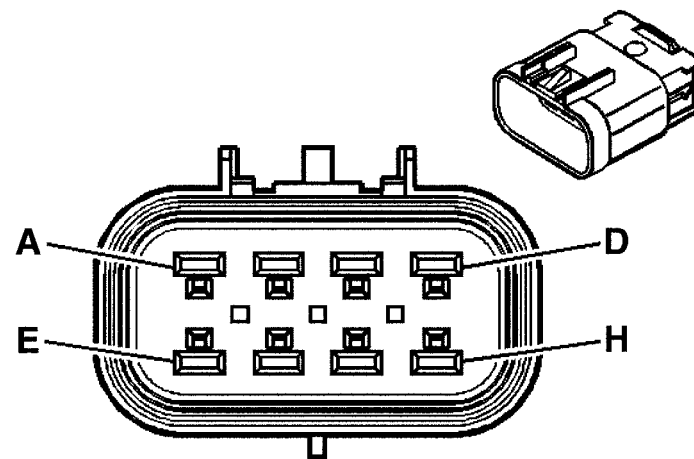
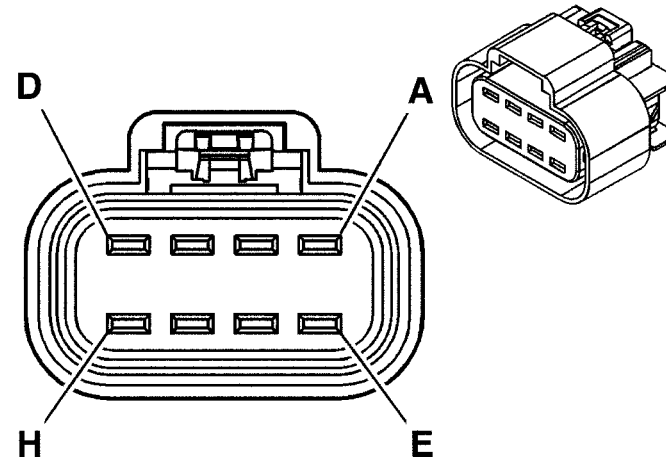
## X100 Forward Lamp Harness to Left Headlamp Harness (X88-Z75)

Connector: 8-Way F GT 280 Series, Sealed (BK)  
 O.E.M.: 15326654  
 Color: **BLK**  
 Service: 88986254

| Pin | Wire Color | Circuit No. | Function                                         |
|-----|------------|-------------|--------------------------------------------------|
| A   | YE         | 712         | Left Headlamp Low Beam Supply Voltage            |
| B   | BK         | 150         | Ground                                           |
| C   | D-GN/WH    | 711         | Left Headlamp High Beam Supply Voltage           |
| D   | --         | --          | Not Used                                         |
| E   | BN         | 2509        | Left Rear Park Lamps Supply Voltage              |
| F   | BK         | 250         | Ground                                           |
| G   | L-BU/WH    | 1314        | Left Front Turn Signal Lamp Supply Voltage (X88) |
| H   | --         | --          | Not Used                                         |

Connector: 8-Way M GT 280 Series, Sealed (BK)  
 O.E.M.: 15326655  
 Color: **BLK**  
 Service: 15306424

| Pin | Wire Color | Circuit No. | Function                                         |
|-----|------------|-------------|--------------------------------------------------|
| A   | YE         | --          | Left Headlamp Low Beam Supply Voltage            |
| B   | BK         | --          | Ground                                           |
| C   | D-GN/WH    | --          | Left Headlamp High Beam Supply Voltage           |
| D   | --         | --          | Not Used                                         |
| E   | BN         | --          | Left Rear Park Lamps Supply Voltage              |
| F   | BK         | --          | Ground                                           |
|     | BK         | --          | Ground                                           |
| G   | L-BU/WH    | --          | Left Front Turn Signal Lamp Supply Voltage (X88) |
| H   | --         | --          | Not Used                                         |



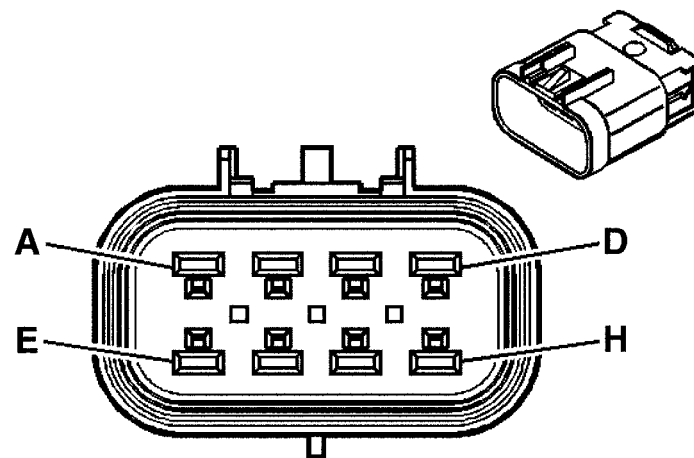
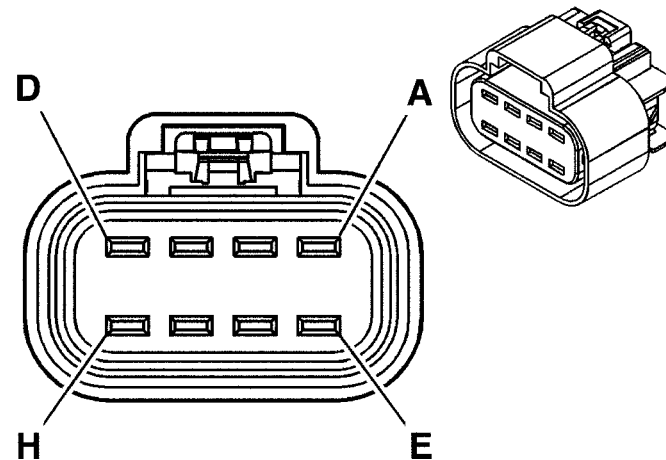
## X106 Forward Lamp Harness to Right Headlamp Harness (X88 or Z75)

Connector: 8-Way F GT 280 Series, Sealed (BK)  
 O.E.M.: 15326654  
 Color: **BLK**  
 Service: 88986254

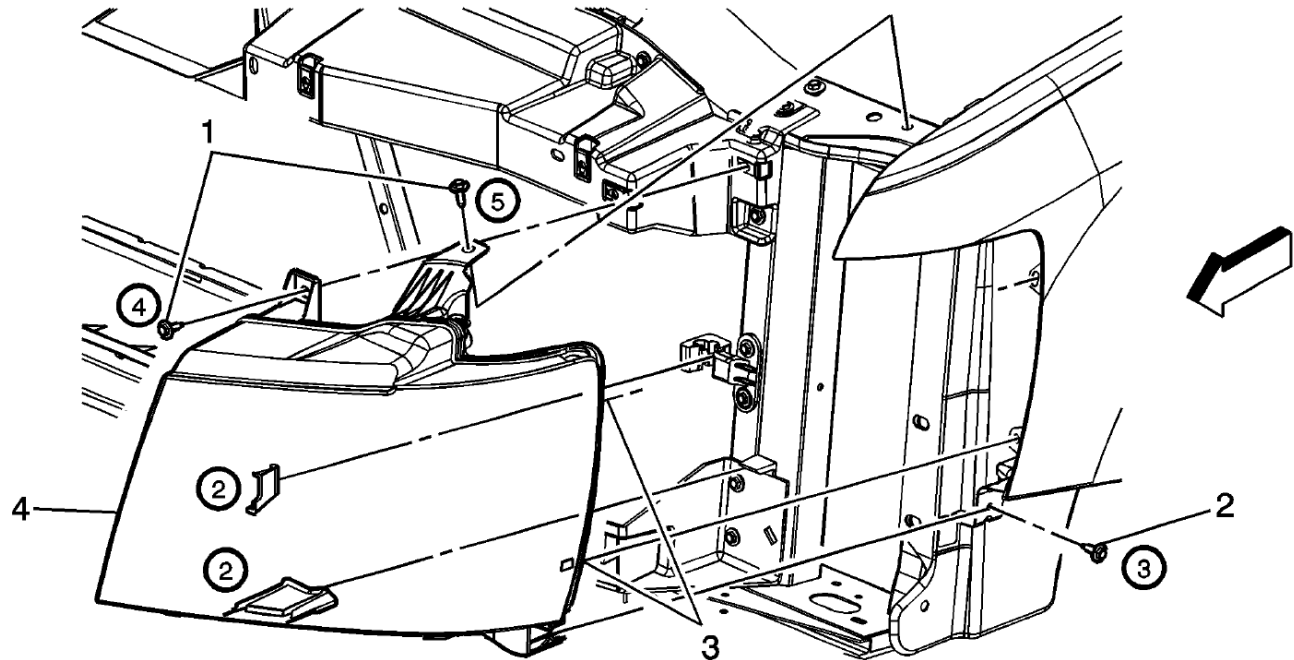
| Pin | Wire Color | Circuit No. | Function                                    |
|-----|------------|-------------|---------------------------------------------|
| A   | TN/WH      | 312         | Right Headlamp Low Beam Supply Voltage      |
| B   | BK         | 250         | Ground                                      |
| C   | L-GN/BK    | 311         | Right Headlamp High Beam Supply Voltage     |
| D   | --         | --          | Not Used                                    |
| E   | BN         | 2609        | Right Rear Park Lamps Supply Voltage        |
| F   | BK         | 150         | Ground                                      |
|     | BK         | 250         | Ground                                      |
| G   | D-BU/WH    | 1315        | Right Front Turn Signal Lamp Supply Voltage |
| H   | --         | --          | Not Used                                    |

Connector: 8-Way M GT 280 Series, Sealed (BK)  
 O.E.M.: 15326655  
 Color: **BLK**  
 Service: 15306424

| Pin | Wire Color | Circuit No. | Function                                    |
|-----|------------|-------------|---------------------------------------------|
| A   | TN/WH      | --          | Right Headlamp Low Beam Supply Voltage      |
| B   | BK         | --          | Ground                                      |
| C   | L-GN/BK    | --          | Right Headlamp High Beam Supply Voltage     |
| D   | --         | --          | Not Used                                    |
| E   | BN         | --          | Right Rear Park Lamps Supply Voltage        |
| F   | BK         | --          | Ground                                      |
|     | BK         | --          | Ground                                      |
| G   | D-BU/WH    | --          | Right Front Turn Signal Lamp Supply Voltage |
| H   | --         | --          | Not Used                                    |

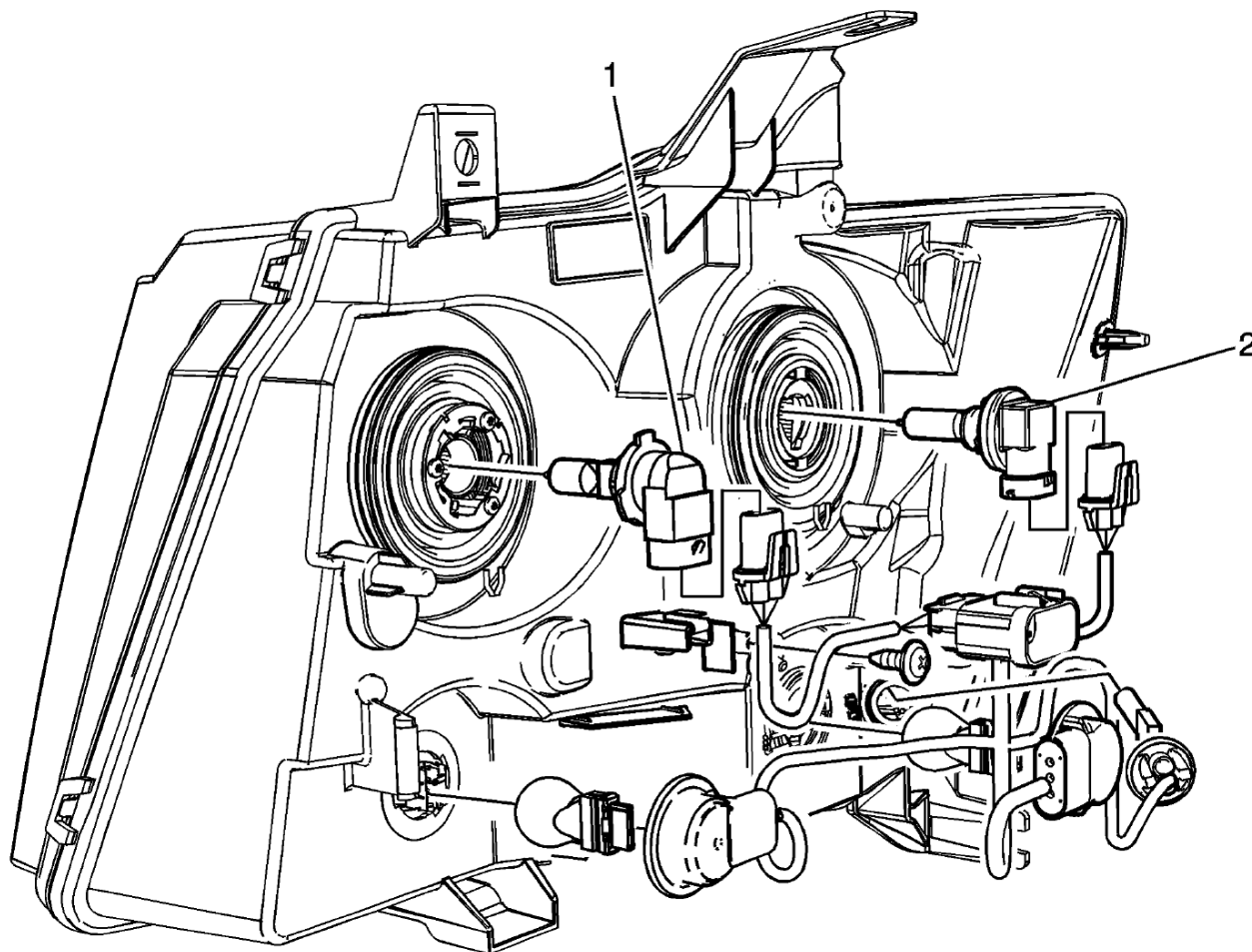


## Headlamp Replacement – Chevrolet Tahoe SUV (X88)



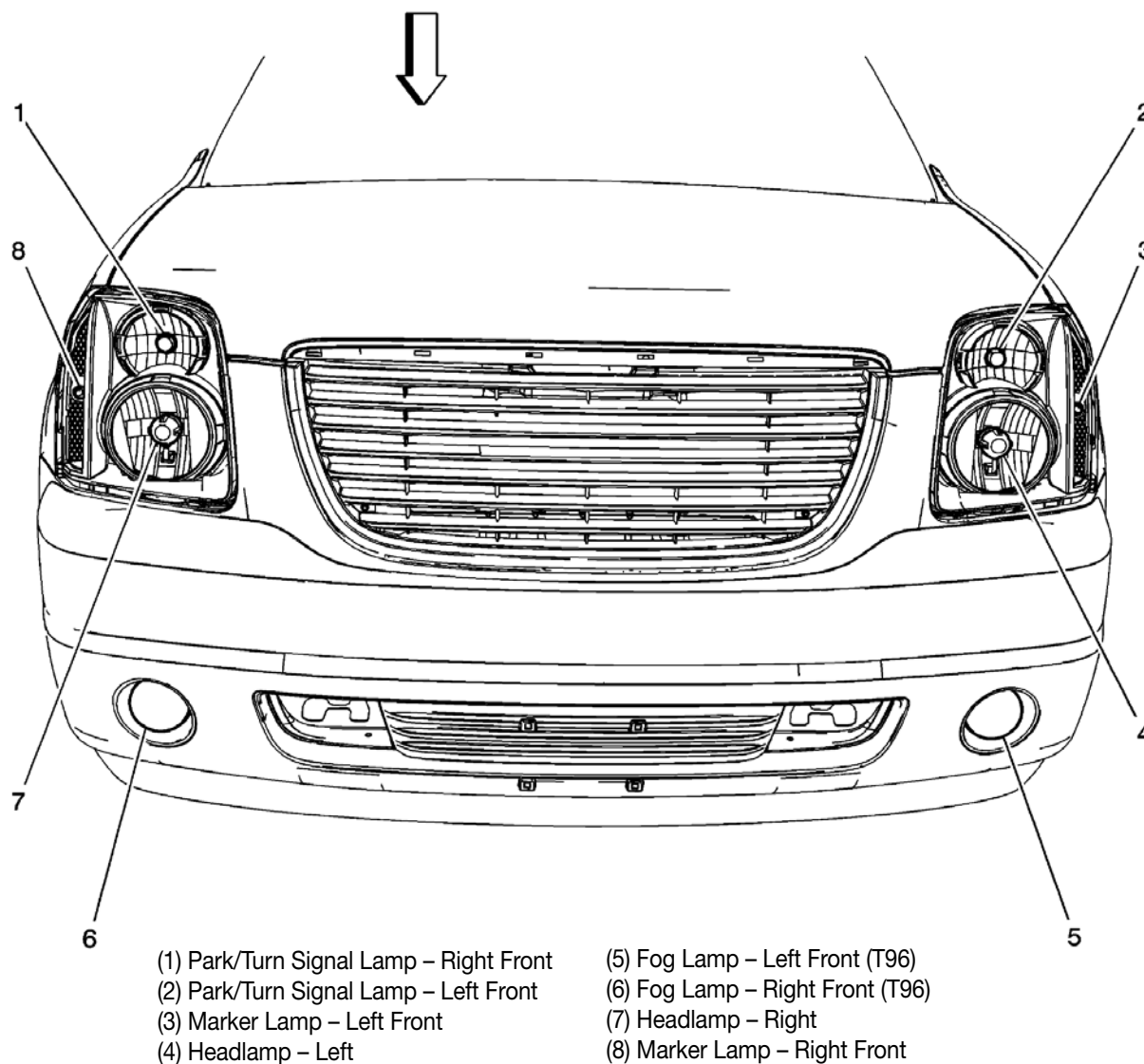
| Callout                                                                                                                                                        | Component Name                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Notice: Refer to Fastener Notice in Cautions and Notices.<br>Fastener Tightening Specifications: Refer to <a href="#">Fastener Tightening Specifications</a> . |                                                                                                              |
| <b>Preliminary Procedure</b><br>Remove the grille assembly. Refer to <a href="#">Fascia Grille Replacement</a>                                                 |                                                                                                              |
| 1                                                                                                                                                              | Headlamp Screw<br><b>Tighten</b> 9 N•m (80 lb in)                                                            |
| 2                                                                                                                                                              | Headlamp Screw<br><b>Tighten</b> 2 N•m (18 lb in)                                                            |
| 3                                                                                                                                                              | Headlamp Assembly Alignment Tabs<br><b>Tip</b> Pull to release the tabs on the back of the headlamp assembly |
| 4                                                                                                                                                              | Headlamp Assembly<br><b>Tip</b> Disconnect the electrical connectors                                         |

## Headlamp Bulb Replacement – Chevrolet Tahoe SUV (X88)

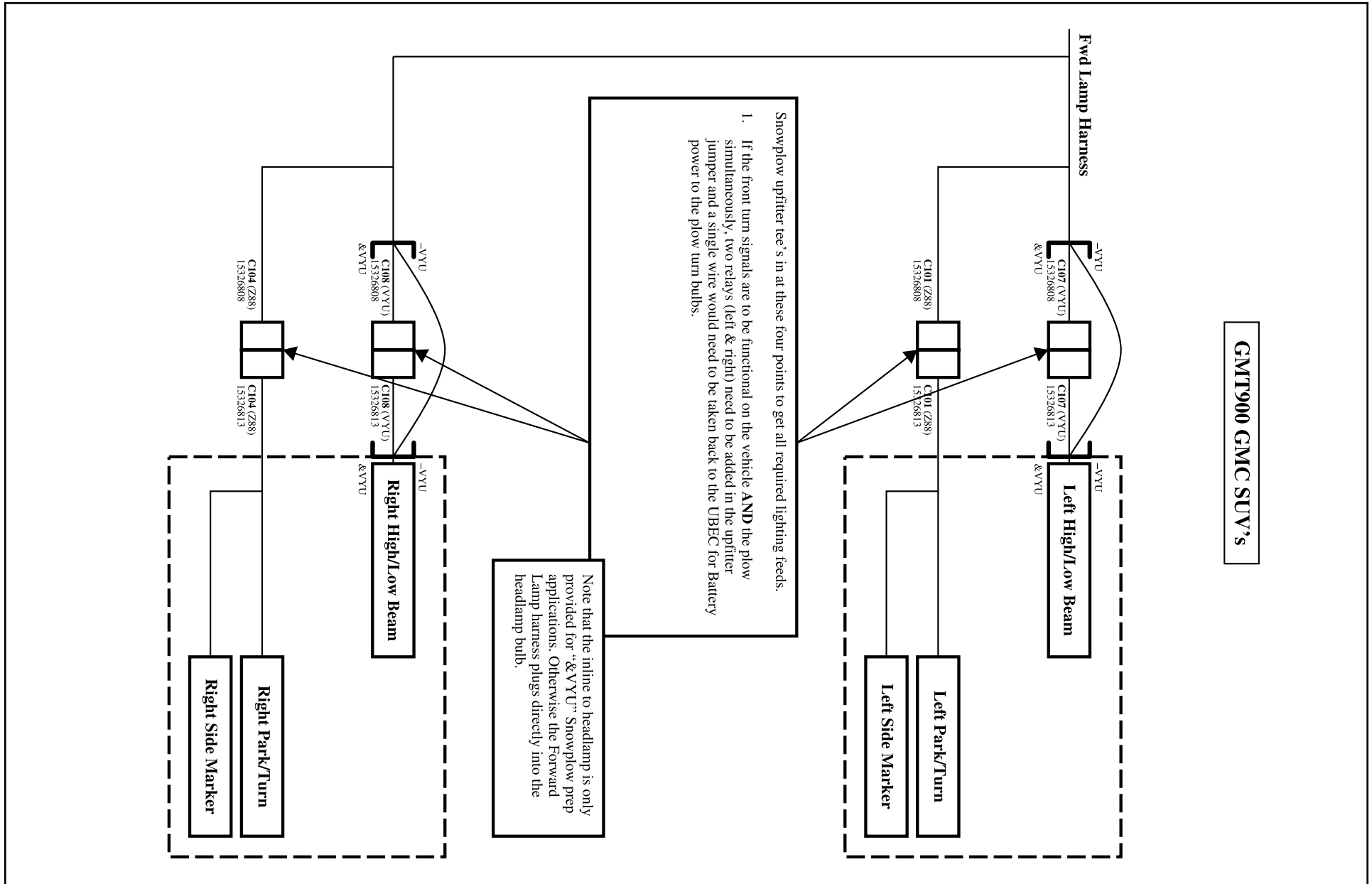


| Callout                                            | Component Name |
|----------------------------------------------------|----------------|
| <b>Preliminary Procedure</b>                       |                |
| Remove the headlamp. Refer to Headlamp Replacement |                |
| 1                                                  | Low Beam Bulb  |
| 2                                                  | High Beam Bulb |

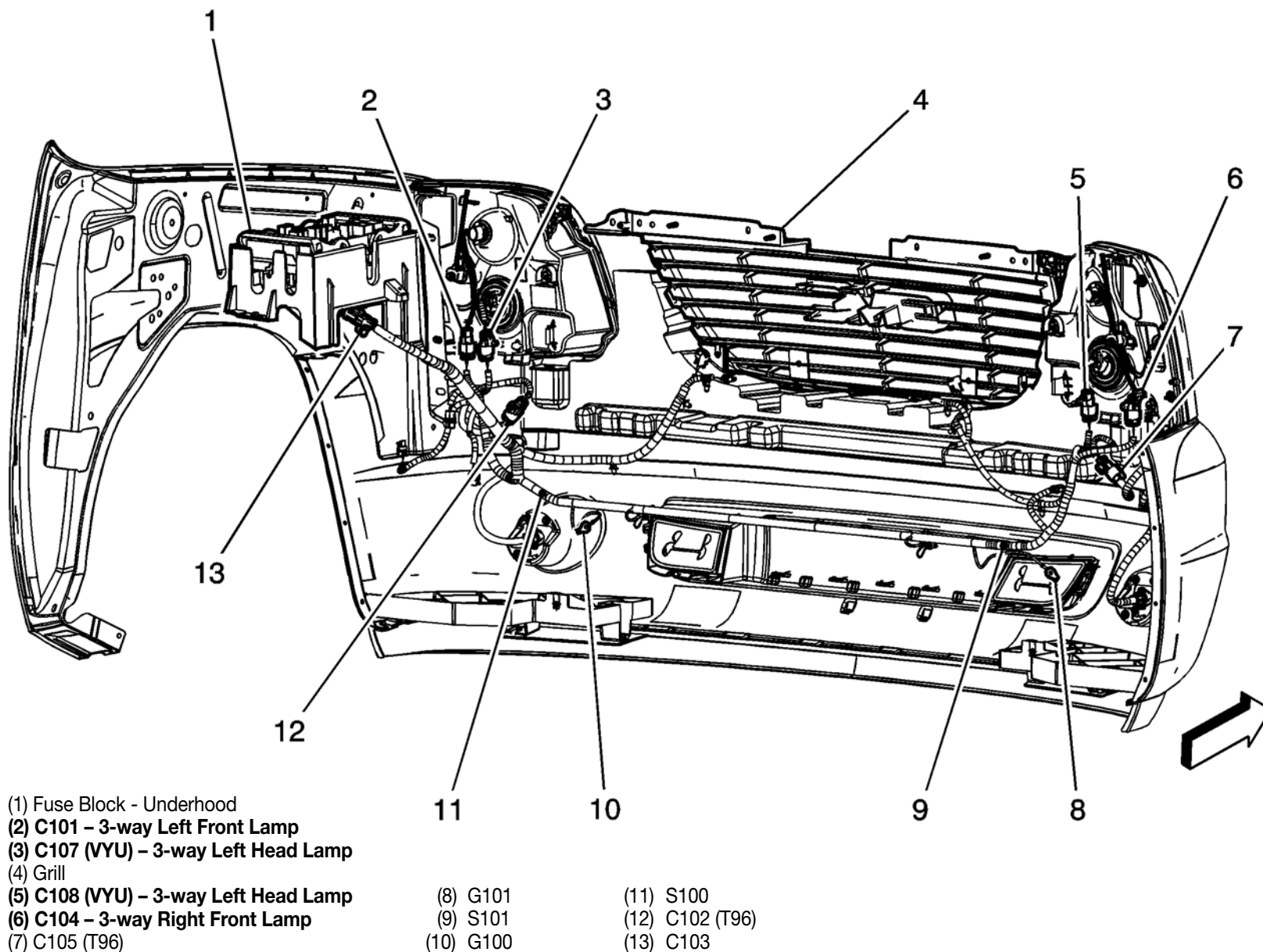
## Front of Vehicle View – GMC Yukon (Z88)



## Forward Lighting & Additional Turn Signals – GMC Yukon (Z88)



## Front Fascia Harnesses GMC Yukon (Z88)



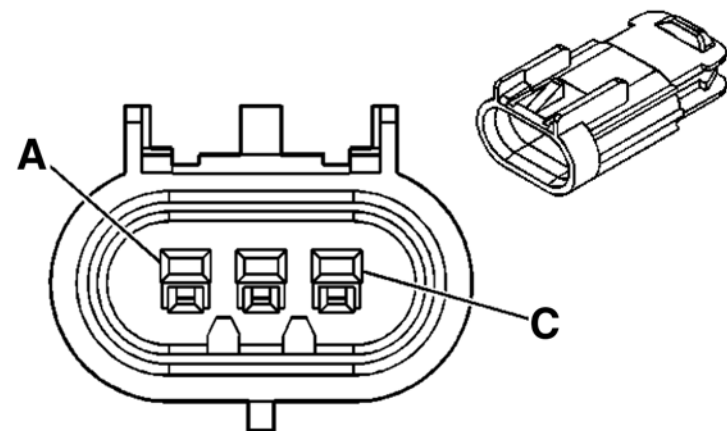
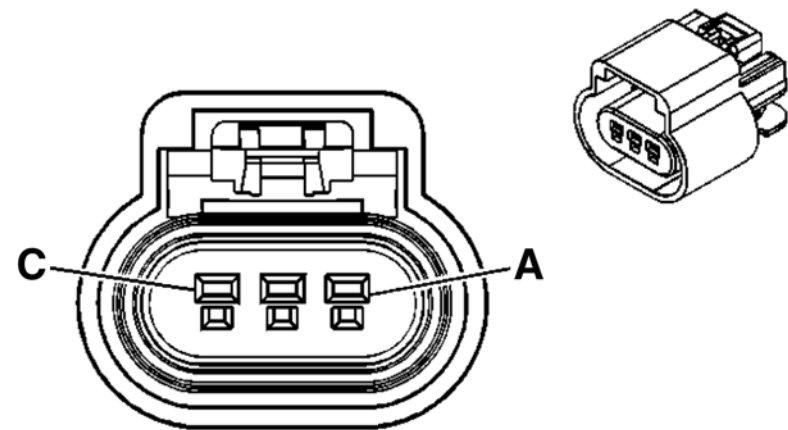
## X104 Forward Lamp Harness to Right Front Lamp Harness (Z88)

Connector: 3-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326808  
 Color: **BLK**  
 Service: See Catalog  
 Terminal/Tray: 12191819/8  
 Core/Insulation Crimp: Pins: A-B: 2/A  
 Core/Insulation Crimp: Pins: C: E/A  
 Release Tool/Test Probe: 15315247/J-35616-2A (GY)

| Pin | Wire Color | Circuit No. | Function                                    |
|-----|------------|-------------|---------------------------------------------|
| A   | BK         | 250         | Ground                                      |
| B   | D-BU/WH    | 1315        | Right Front Turn Signal Lamp Supply Voltage |
| C   | BN         | 2609        | Right Rear Park Lamps Supply Voltage        |

Connector: 3-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326813  
 Color: **BLK**  
 Service: 15306377  
 Terminal: TBD  
 Core/Insulation Crimp: TBD  
 Core/Insulation Crimp: TBD  
 Release Tool/Test Probe: TBD

| Pin | Wire Color | Circuit No. | Function                                    |
|-----|------------|-------------|---------------------------------------------|
| A   | BK         | --          | Ground                                      |
| B   | D-BU/WH    | --          | Right Front Turn Signal Lamp Supply Voltage |
| C   | BN         | --          | Right Rear Park Lamps Supply Voltage        |



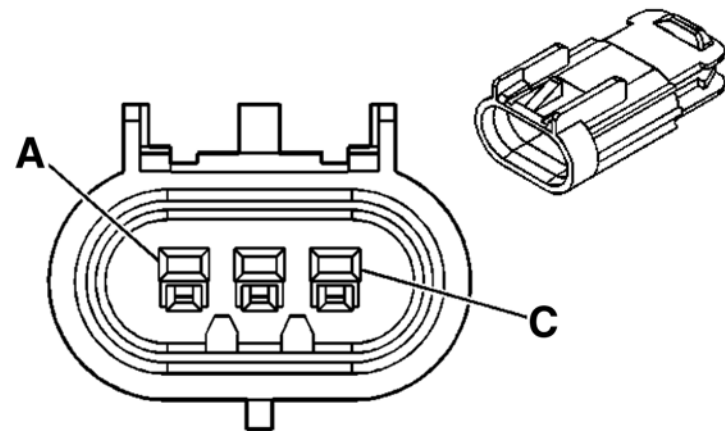
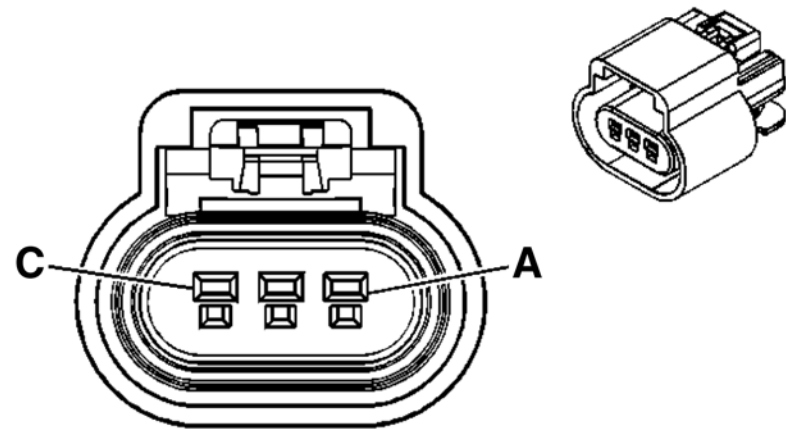
## X107 Forward Lamp Harness to Forward Lamp Harness (VYU)

Connector: 3-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326808  
 Color: **BLK**  
 Service: See Catalog

| Pin | Wire Color | Circuit No. | Function                               |
|-----|------------|-------------|----------------------------------------|
| A   | YE         | 712         | Left Headlamp Low Beam Supply Voltage  |
| B   | BK         | 250         | Ground                                 |
| C   | D-GN/WH    | 711         | Left Headlamp High Beam Supply Voltage |

Connector: 3-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326813  
 Color: **BLK**  
 Service: 15306377

| Pin | Wire Color | Circuit No. | Function                               |
|-----|------------|-------------|----------------------------------------|
| A   | YE         | 712         | Left Headlamp Low Beam Supply Voltage  |
| B   | BK         | 150         | Ground                                 |
| C   | D-GN/WH    | 711         | Left Headlamp High Beam Supply Voltage |



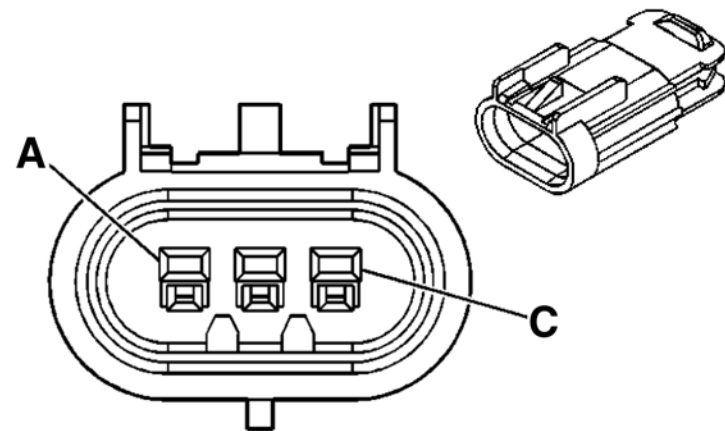
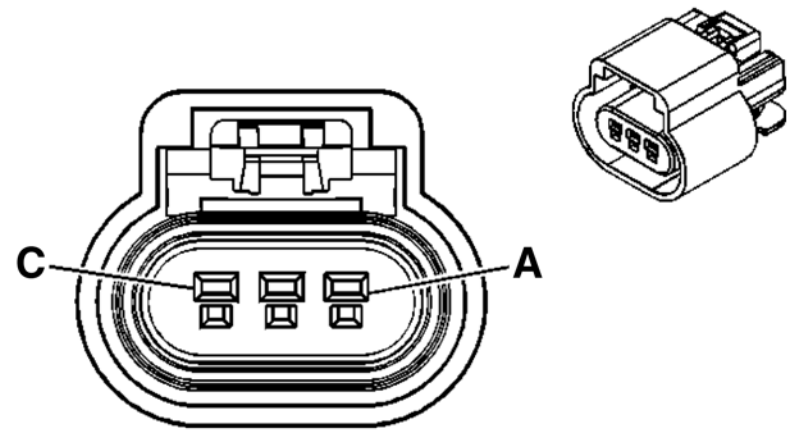
## X108 Forward Lamp Harness to Forward Lamp Harness (VYU)

Connector: 3-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326808  
 Color: **BLK**  
 Service: See Catalog

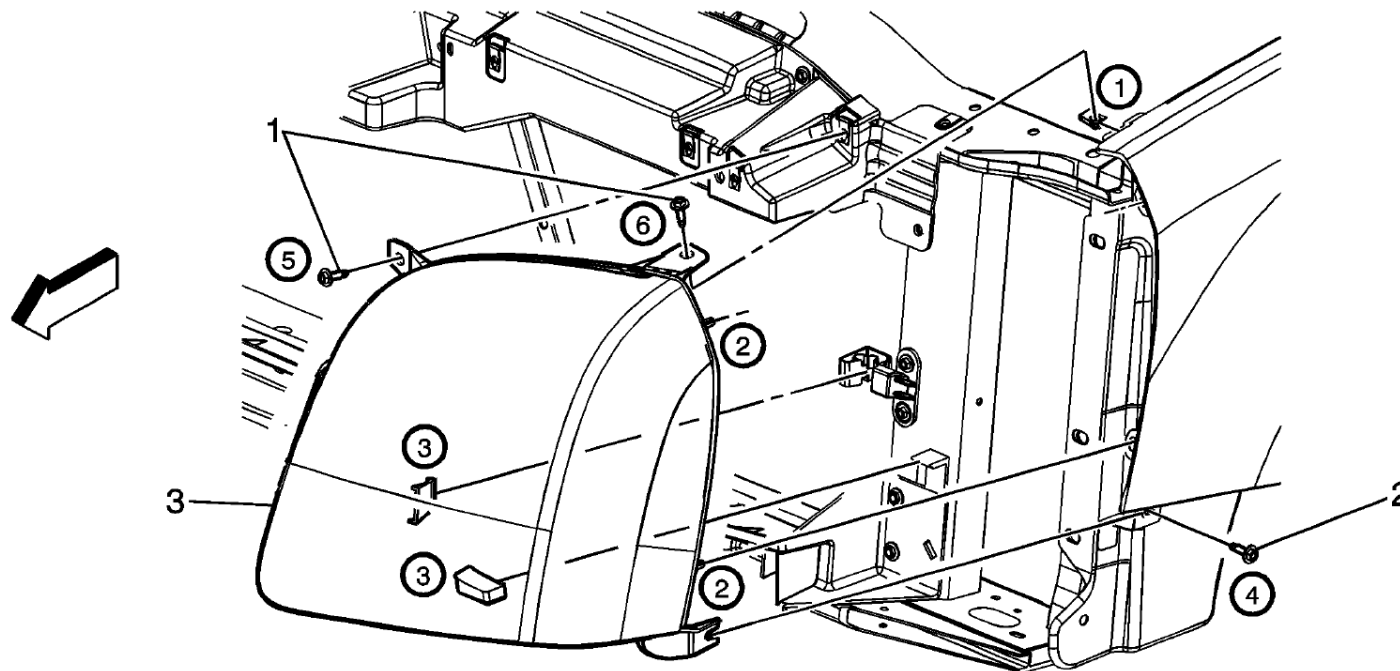
| Pin | Wire Color | Circuit No. | Function                                |
|-----|------------|-------------|-----------------------------------------|
| A   | TN/WH      | 312         | Right Headlamp Low Beam Supply Voltage  |
| B   | BK         | 150         | Ground                                  |
| C   | L-GN/BK    | 311         | Right Headlamp High Beam Supply Voltage |

Connector: 3-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326813  
 Color: **BLK**  
 Service: 15306377

| Pin | Wire Color | Circuit No. | Function                                |
|-----|------------|-------------|-----------------------------------------|
| A   | TN/WH      | 312         | Right Headlamp Low Beam Supply Voltage  |
| B   | BK         | 250         | Ground                                  |
| C   | L-GN/BK    | 311         | Right Headlamp High Beam Supply Voltage |



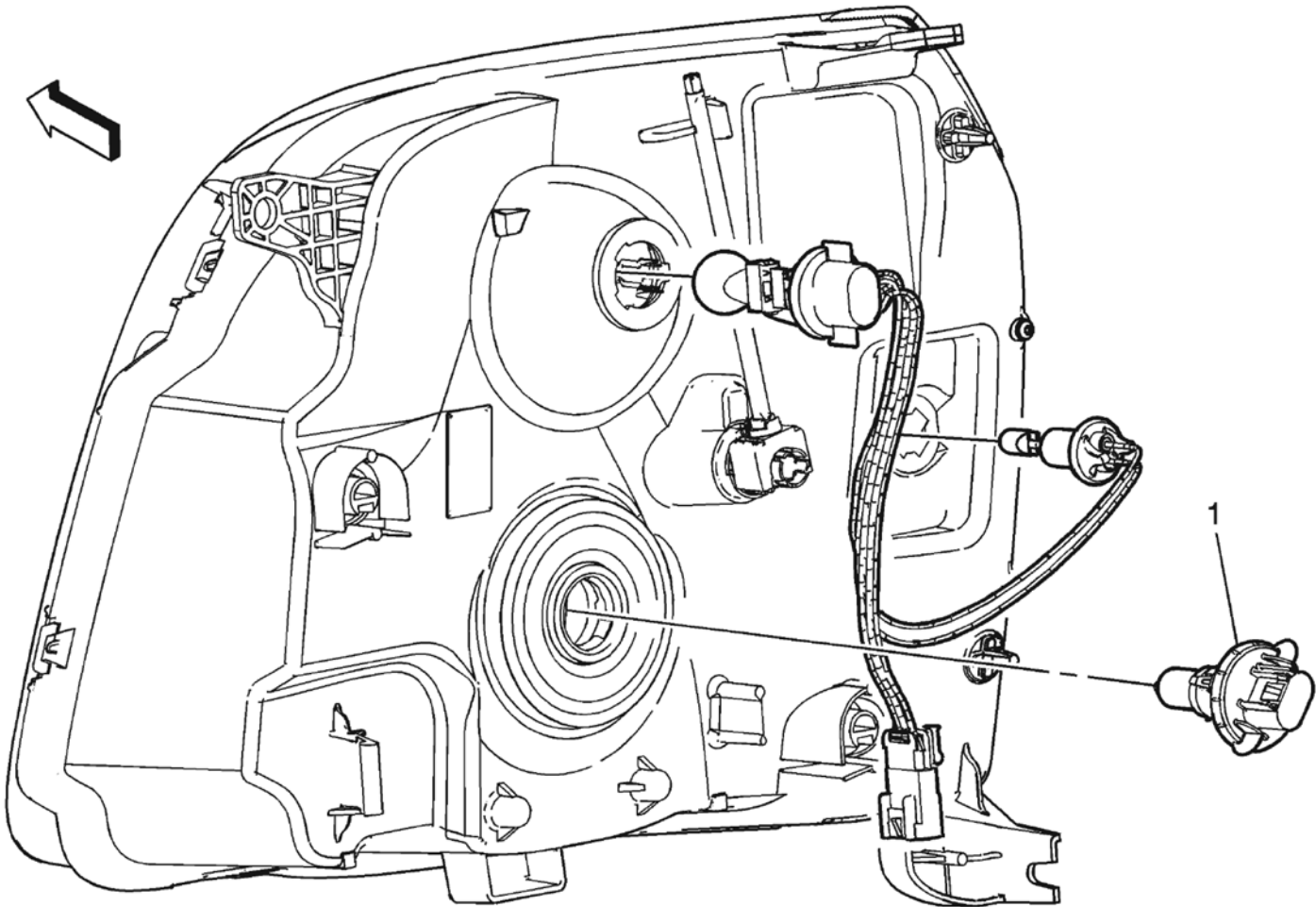
## Headlamp Replacement – GMC Yukon SUV (Z88)



| Callout                       | Component Name                                                                                                      |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedures</b> |                                                                                                                     |
| 1                             | Remove the 2 forward wheelhouse liner screws.                                                                       |
| 2                             | Remove the 2 washer container push pins.                                                                            |
| 3                             | Open the hood.                                                                                                      |
| 4                             | Remove the 6 upper fascia bolts right to the hood latch mechanism.                                                  |
| 5                             | Remove the lower rear fascia bolt from the support bracket.                                                         |
| 6                             | Loosen the 2 fascia to fender bolts from under the fascia.                                                          |
| 7                             | Pull the outboard end of the front fascia straight outboard until it disengages from the fender attachment bracket. |

| Callout                       | Component Name                                                                                                               |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedures</b> |                                                                                                                              |
| 8                             | Pull the fascia forward and downward to allow enough clearance to remove the headlamp assembly.                              |
| 9                             | Loosen the lower outboard attachment bolts.                                                                                  |
| 10                            | Remove the 2 upper headlamp bolts.                                                                                           |
| 11                            | Grasp the headlamp at the upper inboard and lower outboard side and pull the headlamp forward to disengage the locating tab. |
| 12                            | Pull the outboard side of the headlamp forward until the 2 locating pins disengage from the radiator support.                |
| 13                            | Disconnect the forward lamp harness connector.                                                                               |

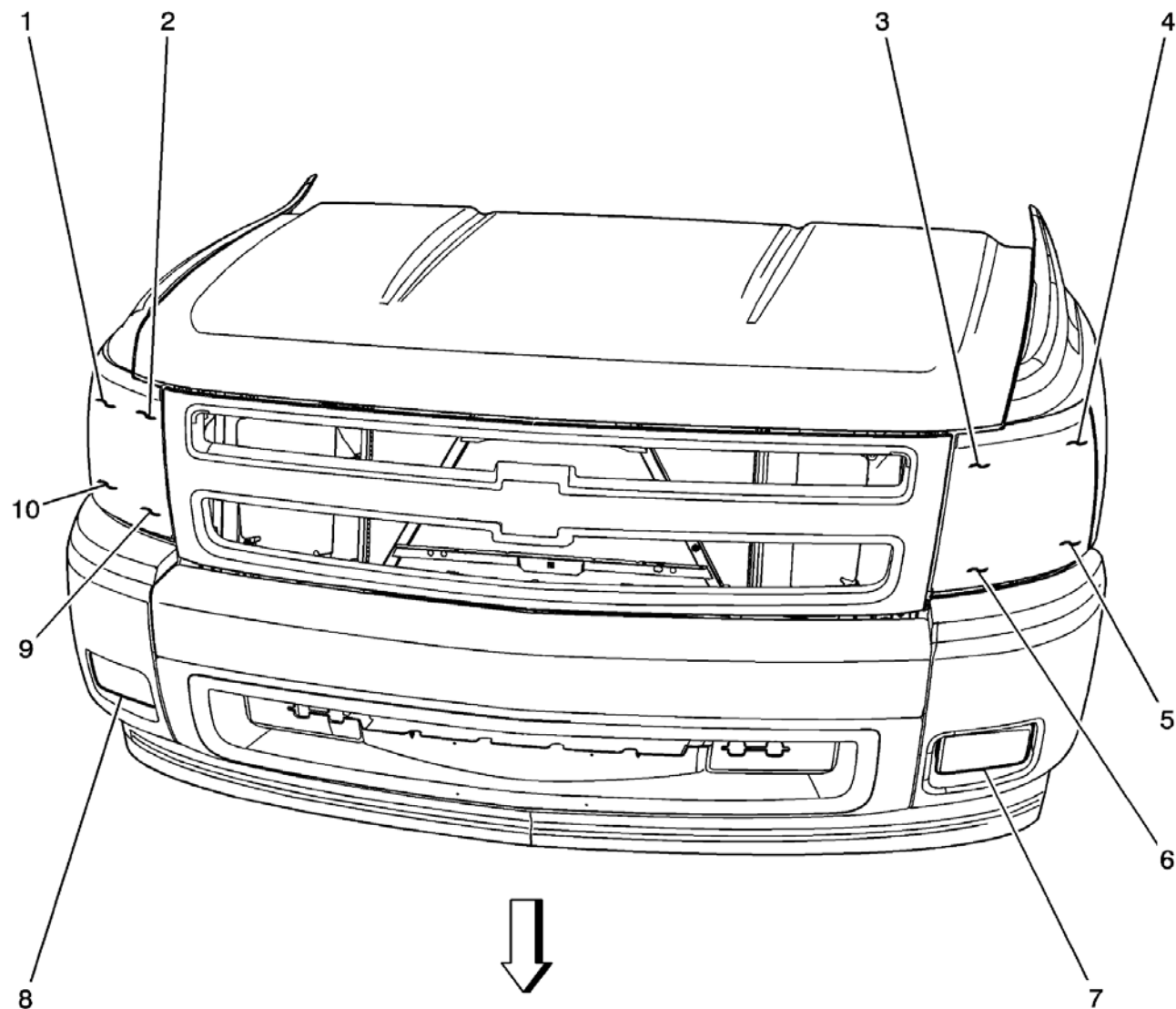
**Headlamp Bulb Replacement – GMC Yukon SUV (Z88)**



| Callout                                                                                            | Component Name     |
|----------------------------------------------------------------------------------------------------|--------------------|
| <b>Preliminary Procedure</b><br>Remove the headlamp. Refer to <a href="#">Headlamp Replacement</a> |                    |
| 1                                                                                                  | High Low Beam Bulb |

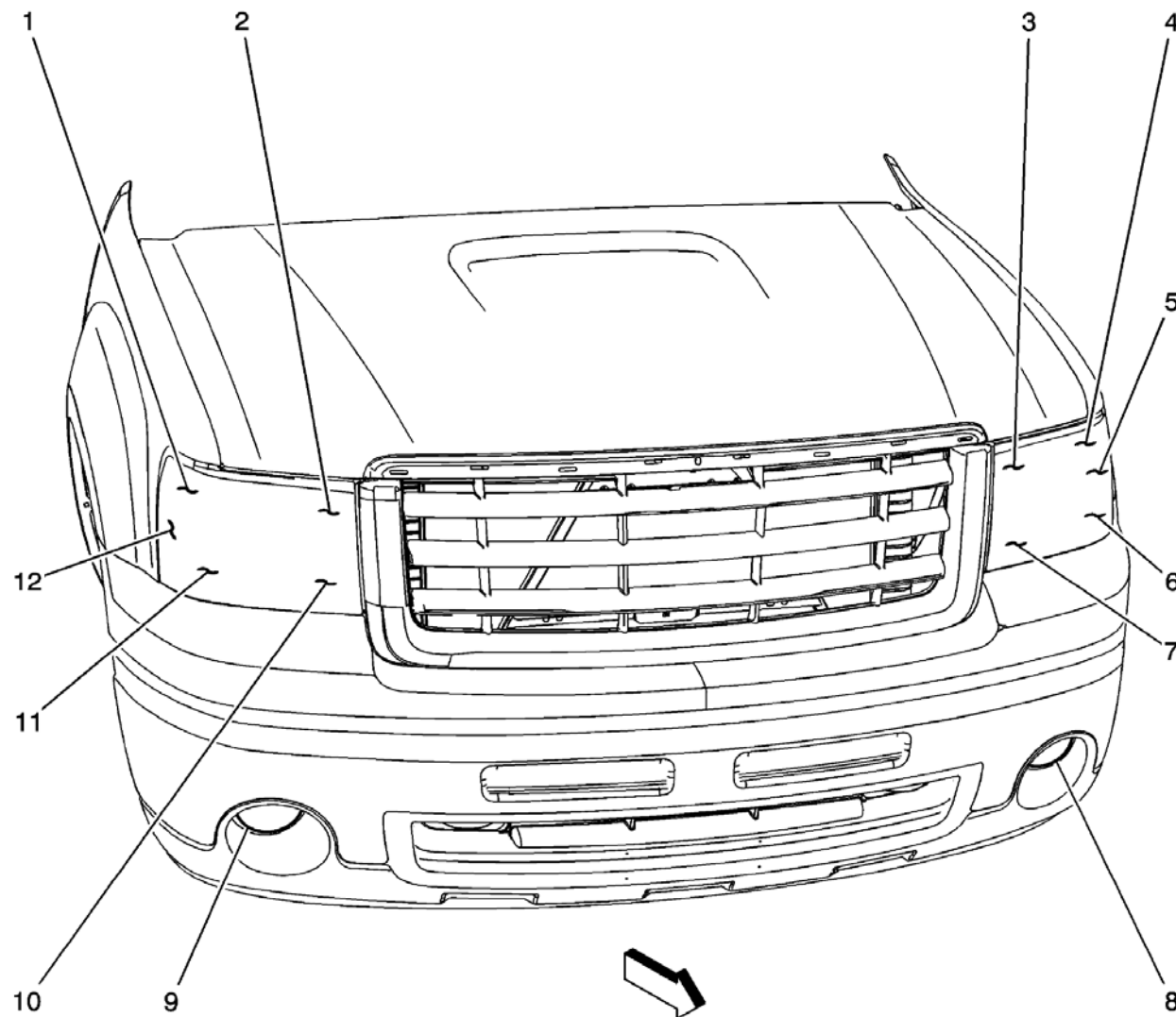
## Front Lights – Chevrolet Silverado Pickup (X88)

- (1) Park/Turn Signal Lamp – Right Front Upper
- (2) Headlamp – Low Beam – Right
- (3) Headlamp – Low Beam – Left
- (4) Park/Turn Signal Lamp – Left Front Upper
- (5) Park/Turn Signal Lamp – Right Front Lower
- (6) Headlamp – High Beam – Left
- (7) Fog Lamp – Left Front (T96)
- (8) Fog Lamp – Right Front (T96)
- (9) Headlamp – High Beam – Right
- (10) Park/Turn Signal Lamp – Right Front Lower

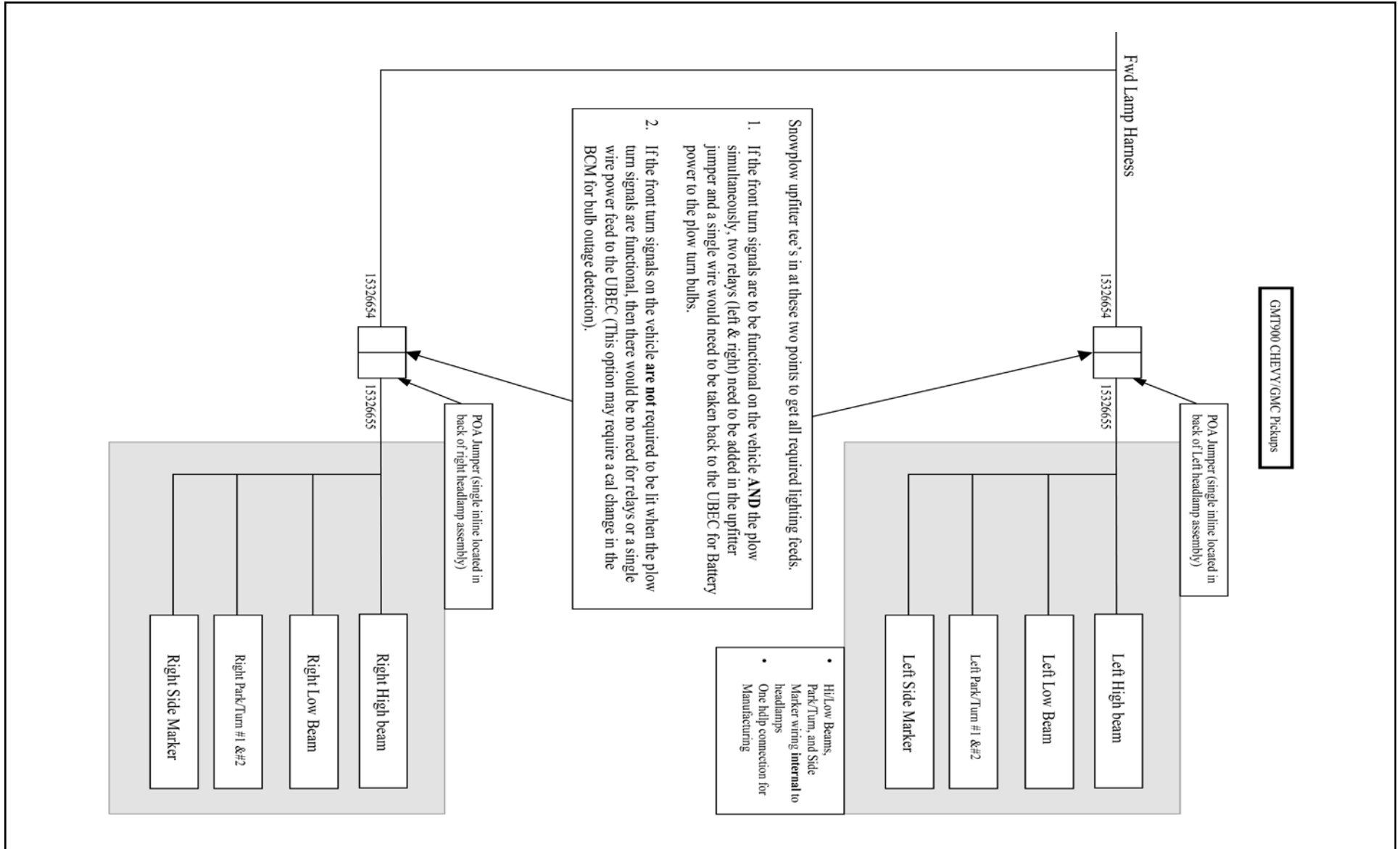


## Front Lights – GMC Sierra Pickup (Z88)

- (1) Headlamp – Low Beam – Right
- (2) Park/Turn Signal Lamp – Right Front Upper
- (3) Park/Turn Signal Lamp – Left Front Upper
- (4) Headlamp – Low Beam – Left
- (5) Marker Lamp – Left Front
- (6) Headlamp – High Beam – Left
- (7) Park/Turn Signal Lamp – Left Front Lower
- (8) Fog Lamp – Left Front (T96)
- (9) Fog Lamp – Right Front (T96)
- (10) Park/Turn Signal Lamp – Right Front Lower
- (11) Headlamp – High Beam – Right
- (12) Marker Lamp – Right Front

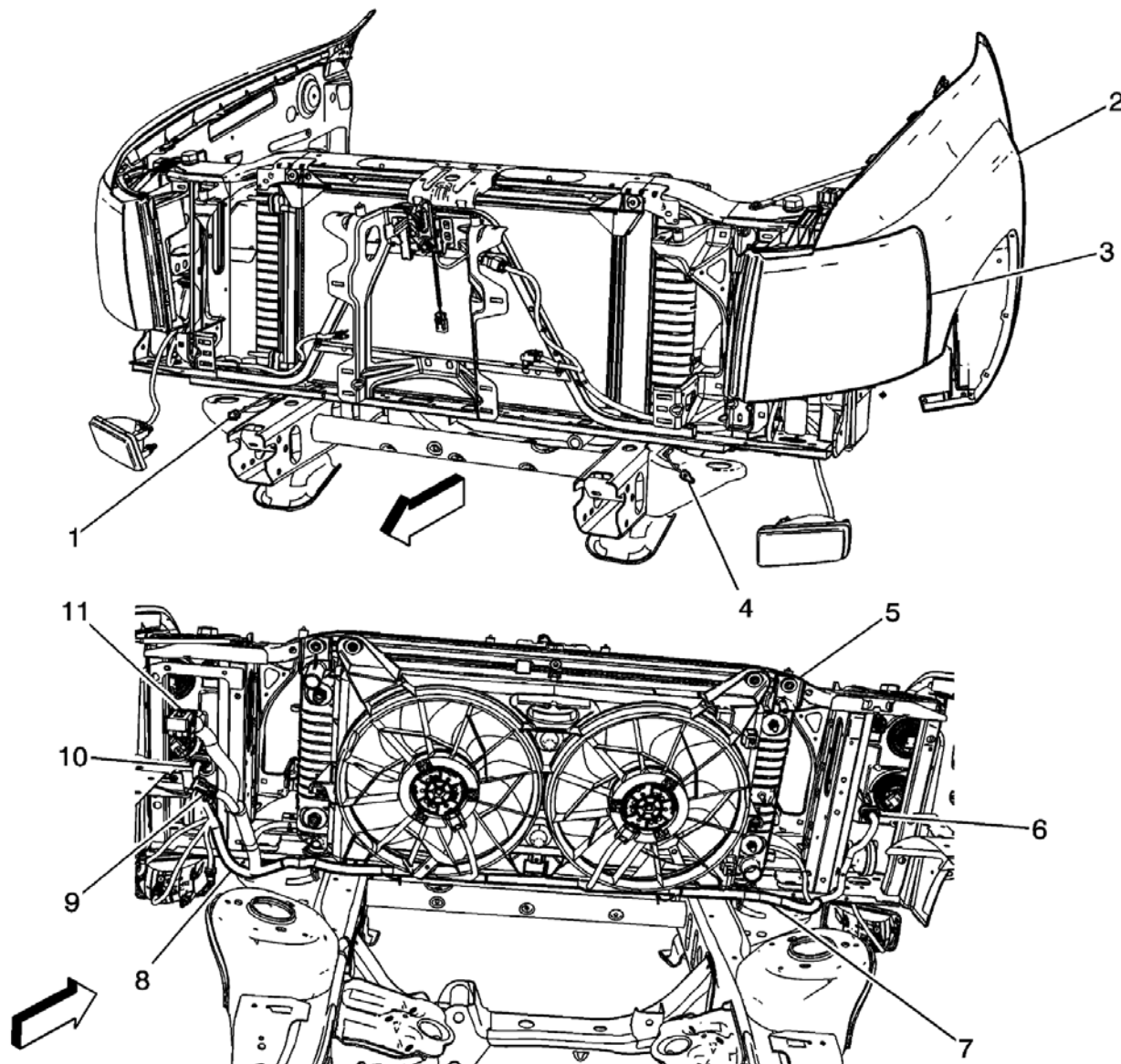


## Forward Lighting & Additional Turn Signals – Chevrolet Silverado/GMC Sierra Pickups



## Forward Lamp Harness – Diesel – Chevrolet Silverado/GMC Sierra Pickups

- (1) G101
- (2) Left Front Fender
- (3) Left Front Headlamp
- (4) G100
- (5) Radiator
- (6) X-106**
- (7) J101
- (8) J100
- (9) X103**
- (10) X100
- (11) Fuse Block – Underhood X1



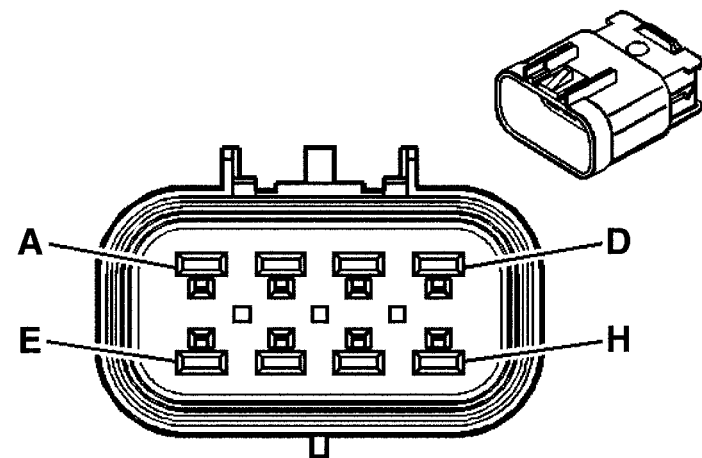
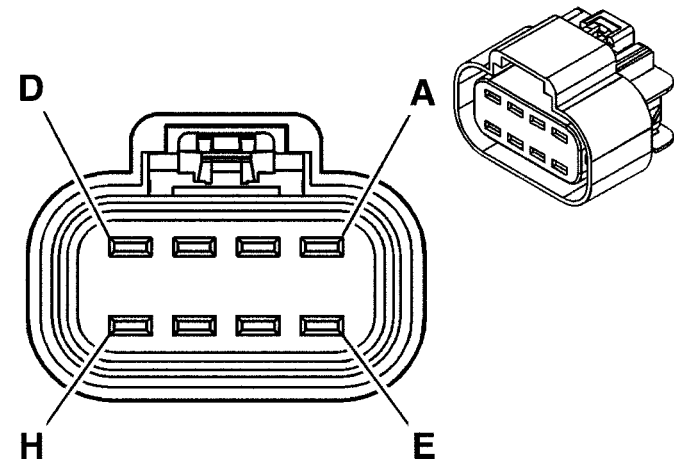
## X100 Forward Lamp Harness to Left Headlamp Harness

Connector: 8-Way F GT 280 Series, Sealed (BK)  
 O.E.M.: 15326654  
 Color: **BLK**  
 Service: 88986254

| Pin | Wire Color | Circuit No. | Function                                         |
|-----|------------|-------------|--------------------------------------------------|
| A   | YE         | 712         | Left Headlamp Low Beam Supply Voltage            |
| B   | BK         | 150         | Ground                                           |
| C   | D-GN/WH    | 711         | Left Headlamp High Beam Supply Voltage           |
| D   | --         | --          | Not Used                                         |
| E   | BN         | 2509        | Left Rear Park Lamps Supply Voltage              |
| F   | BK         | 250         | Ground                                           |
| G   | L-BU/WH    | 1314        | Left Front Turn Signal Lamp Supply Voltage (X88) |
| H   | --         | --          | Not Used                                         |

Connector: 8-Way M GT 280 Series, Sealed (BK)  
 O.E.M.: 15326655  
 Color: **BLK**  
 Service: 15306424

| Pin | Wire Color | Circuit No. | Function                                         |
|-----|------------|-------------|--------------------------------------------------|
| A   | YE         | --          | Left Headlamp Low Beam Supply Voltage            |
| B   | BK         | --          | Ground                                           |
| C   | D-GN/WH    | --          | Left Headlamp High Beam Supply Voltage           |
| D   | --         | --          | Not Used                                         |
| E   | BN         | --          | Left Rear Park Lamps Supply Voltage              |
| F   | BK         | --          | Ground                                           |
|     | BK         | --          | Ground                                           |
| G   | L-BU/WH    | --          | Left Front Turn Signal Lamp Supply Voltage (X88) |
| H   | --         | --          | Not Used                                         |



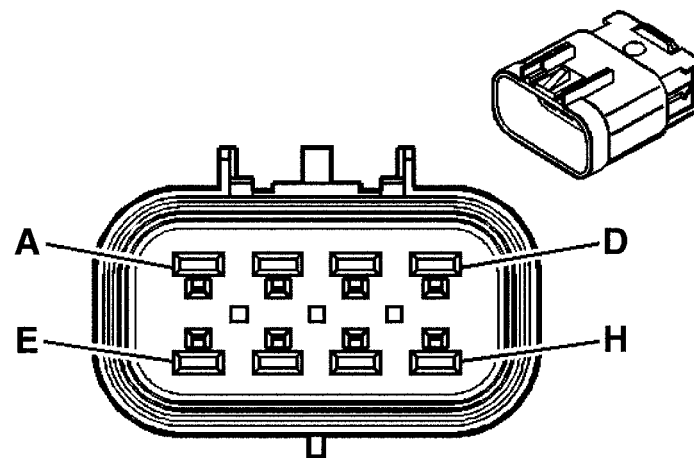
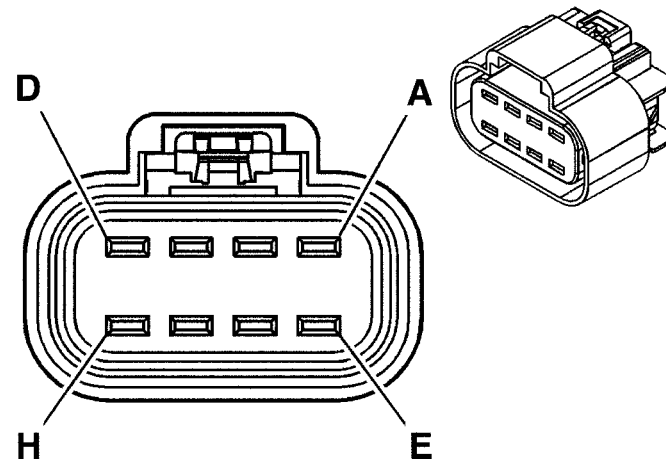
## X106 Forward Lamp Harness to Right Headlamp Harness

Connector: 8-Way F GT 280 Series, Sealed (BK)  
 O.E.M.: 15326654  
 Color: **BLK**  
 Service: 88986254

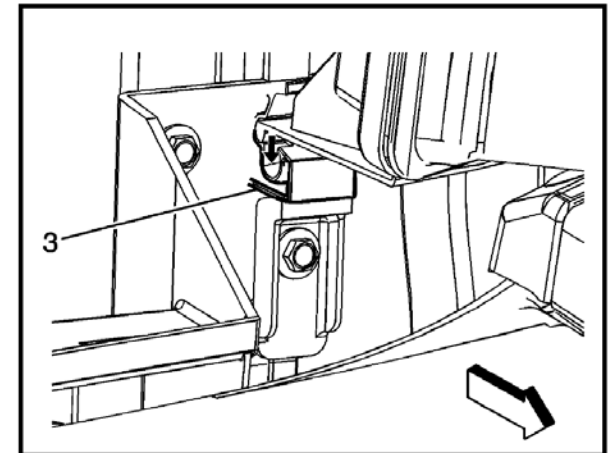
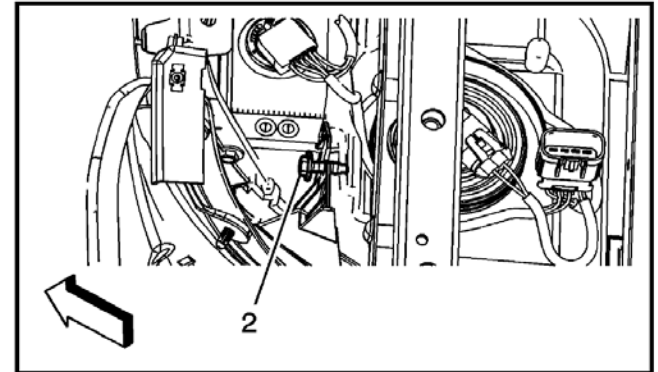
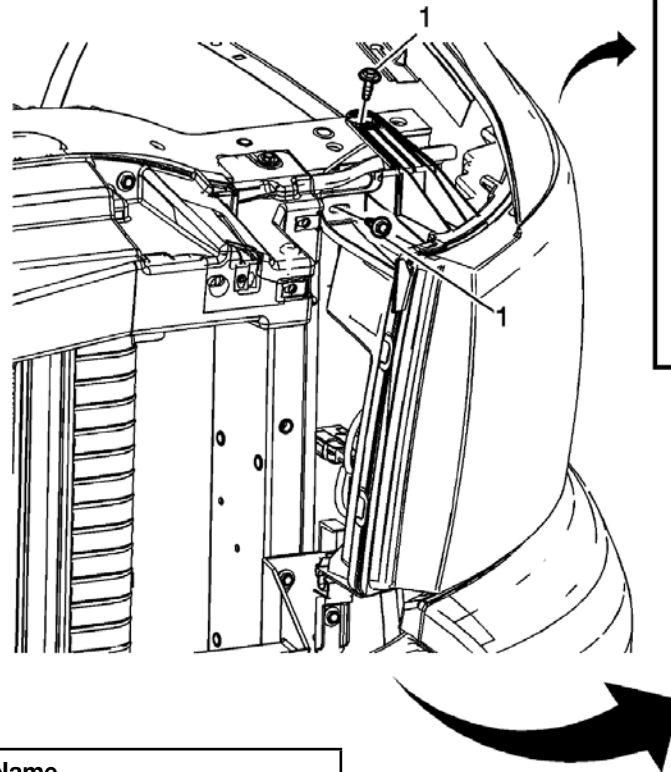
| Pin | Wire Color | Circuit No. | Function                                    |
|-----|------------|-------------|---------------------------------------------|
| A   | TN/WH      | 312         | Right Headlamp Low Beam Supply Voltage      |
| B   | BK         | 250         | Ground                                      |
| C   | L-GN/BK    | 311         | Right Headlamp High Beam Supply Voltage     |
| D   | --         | --          | Not Used                                    |
| E   | BN         | 2609        | Right Rear Park Lamps Supply Voltage        |
| F   | BK         | 150         | Ground                                      |
|     | BK         | 250         | Ground                                      |
| G   | D-BU/WH    | 1315        | Right Front Turn Signal Lamp Supply Voltage |
| H   | --         | --          | Not Used                                    |

Connector: 8-Way M GT 280 Series, Sealed (BK)  
 O.E.M.: 15326655  
 Color: **BLK**  
 Service: 15306424

| Pin | Wire Color | Circuit No. | Function                                    |
|-----|------------|-------------|---------------------------------------------|
| A   | TN/WH      | --          | Right Headlamp Low Beam Supply Voltage      |
| B   | BK         | --          | Ground                                      |
| C   | L-GN/BK    | --          | Right Headlamp High Beam Supply Voltage     |
| D   | --         | --          | Not Used                                    |
| E   | BN         | --          | Right Rear Park Lamps Supply Voltage        |
| F   | BK         | --          | Ground                                      |
|     | BK         | --          | Ground                                      |
| G   | D-BU/WH    | --          | Right Front Turn Signal Lamp Supply Voltage |
| H   | --         | --          | Not Used                                    |

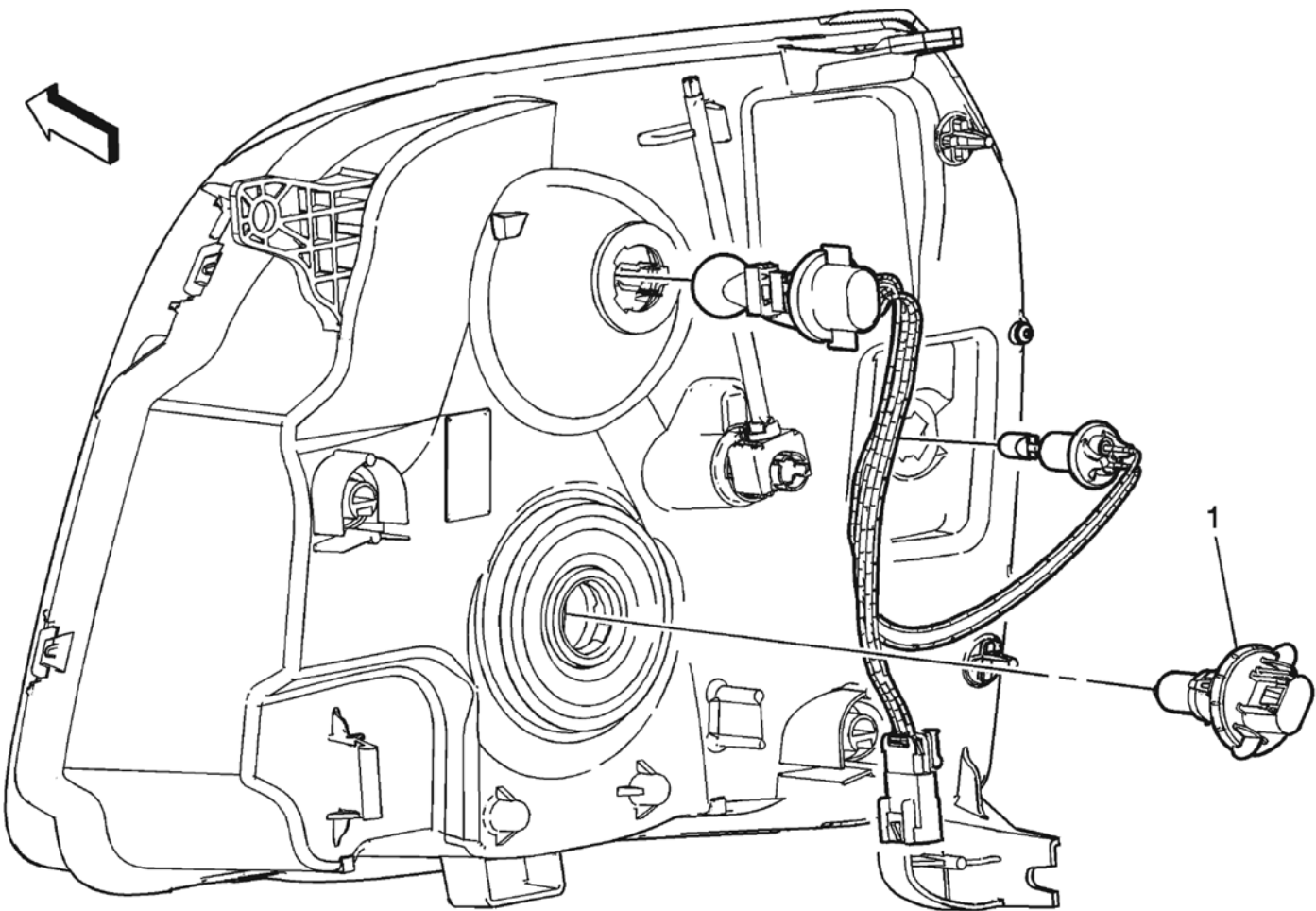


## Headlamp Replacement – Chevrolet Silverado/GMC Sierra Pickups



| Callout                       | Component Name                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Preliminary Procedures</b> |                                                                                                                                                                                                                                                                                                                                        |
| 1                             | Remove the front bumper fascia trim cap. Refer to <a href="#">Front Bumper Fascia Trim Cap Replacement</a> .                                                                                                                                                                                                                           |
| 2                             | Disengage the front portion of either the LF or RF wheelhouse liner in order to access the lower inside hidden headlamp bolt. Refer to either <a href="#">Front Wheelhouse Liner Replacement – Left Side</a> for the left side or <a href="#">Front Wheelhouse Liner Replacement – Right Side</a> for the right side wheelhouse liner. |
| 3                             | Loosen only, do not remove, the lower outside hidden headlamp bolt (2).                                                                                                                                                                                                                                                                |

**Headlamp Bulb Replacement – GMC Yukon (Z88)**



| Callout                                                                                            | Component Name     |
|----------------------------------------------------------------------------------------------------|--------------------|
| <b>Preliminary Procedure</b><br>Remove the headlamp. Refer to <a href="#">Headlamp Replacement</a> |                    |
| 1                                                                                                  | High Low Beam Bulb |

## Replacement Bulbs

### Replacement Bulbs – 2008 Chevrolet Silverado

| Exterior Lamp                                       | Bulb Number |
|-----------------------------------------------------|-------------|
| Backup Lamp                                         | 3047        |
| Backup Lamp*                                        | 1156        |
| Cargo lamp and Center High-Mounted Stoplamp (CHMSL) | 912         |
| Daytime Running Lamps                               | 4114K       |
| Fender Marker Lamp                                  | W5WLL       |
| <b>High-Beam Headlamp</b>                           | <b>9005</b> |
| <b>Low-Beam Headlamp</b>                            | <b>H11</b>  |
| License Plate Lamp                                  | 168         |
| Sidemarkers Lamp/Stoplamp/Taillamp/Turn Signal Lamp | 3047        |
| Stoplamp/Turn Signal Lamp/Taillamp*                 | 1157        |

\*Chassis Cab Models

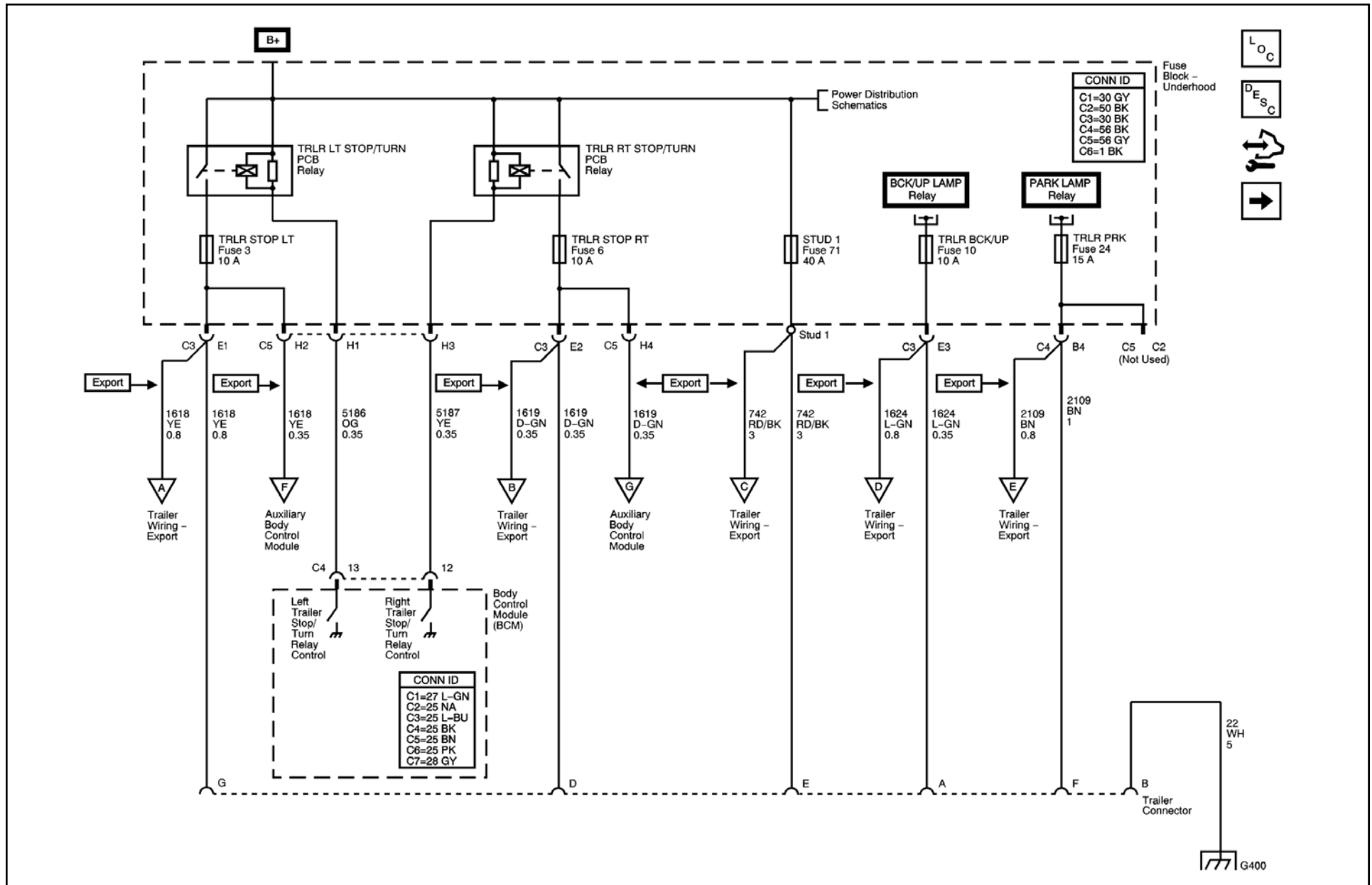
### Replacement Bulbs – 2008 Chevrolet Tahoe

| Exterior Lamp                                             | Bulb Number |
|-----------------------------------------------------------|-------------|
| Backup Lamp                                               | 3047        |
| Center High-Mounted Stoplamp (CHMSL), Cargo Lamp          | 912         |
| Front Turn Signal Lamp, Sidemarkers Lamp and Parking Lamp | 3157A       |
| <b>High-Beam Headlamp</b>                                 | <b>9005</b> |
| <b>Low-Beam Headlamp</b>                                  | <b>H11</b>  |
| License Plate Lamp                                        | 168         |
| Rear Turn Signal Lamp, Taillamp, and Stoplamp             | 3047        |
| Sidemarkers Lamp                                          | 194         |

### Replacement Bulbs – 2008 GMC Yukon

| Exterior Lamp                                 | Bulb Number |
|-----------------------------------------------|-------------|
| Backup Lamp                                   | 7441        |
| <b>High-Beam Headlamp</b>                     | <b>H13</b>  |
| <b>Low-Beam Headlamp</b>                      | <b>H13</b>  |
| License Plate Lamp                            | 168         |
| Rear Turn Signal Lamp, Taillamp, and Stoplamp | 3057KX      |

## Trailer Lighting Schematic



## Trailer Connector

### Connector Part Information

OEM: 15354653

Service: 15306164

Description: 7-Way F Metri-Pack 280 630 Series Sealed

Pins: B

Terminal/Tray: 12052456/3

Core/Insulation Crimp: TBD

Release Tool/Test Probe: TBD

Pins: A, D, F, G

Terminal/Tray: 12110847/4

Core/Insulation Crimp: C/5

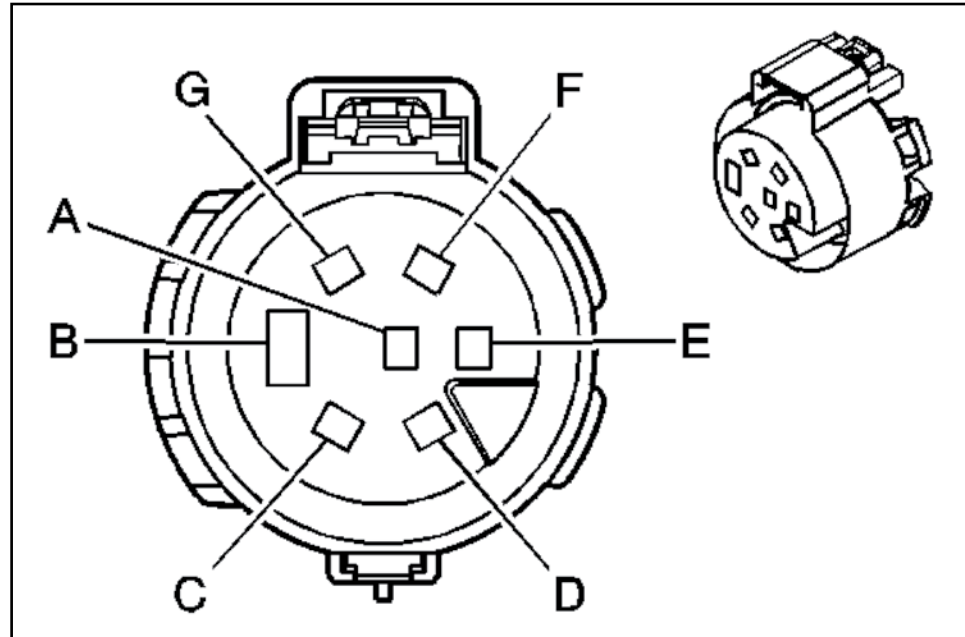
Release Tool/Test Probe: 15315247/J-35616-4A (PU)

Pins: C, E

Terminal/Tray: 12110845/4

Core/Insulation Crimp: F/5

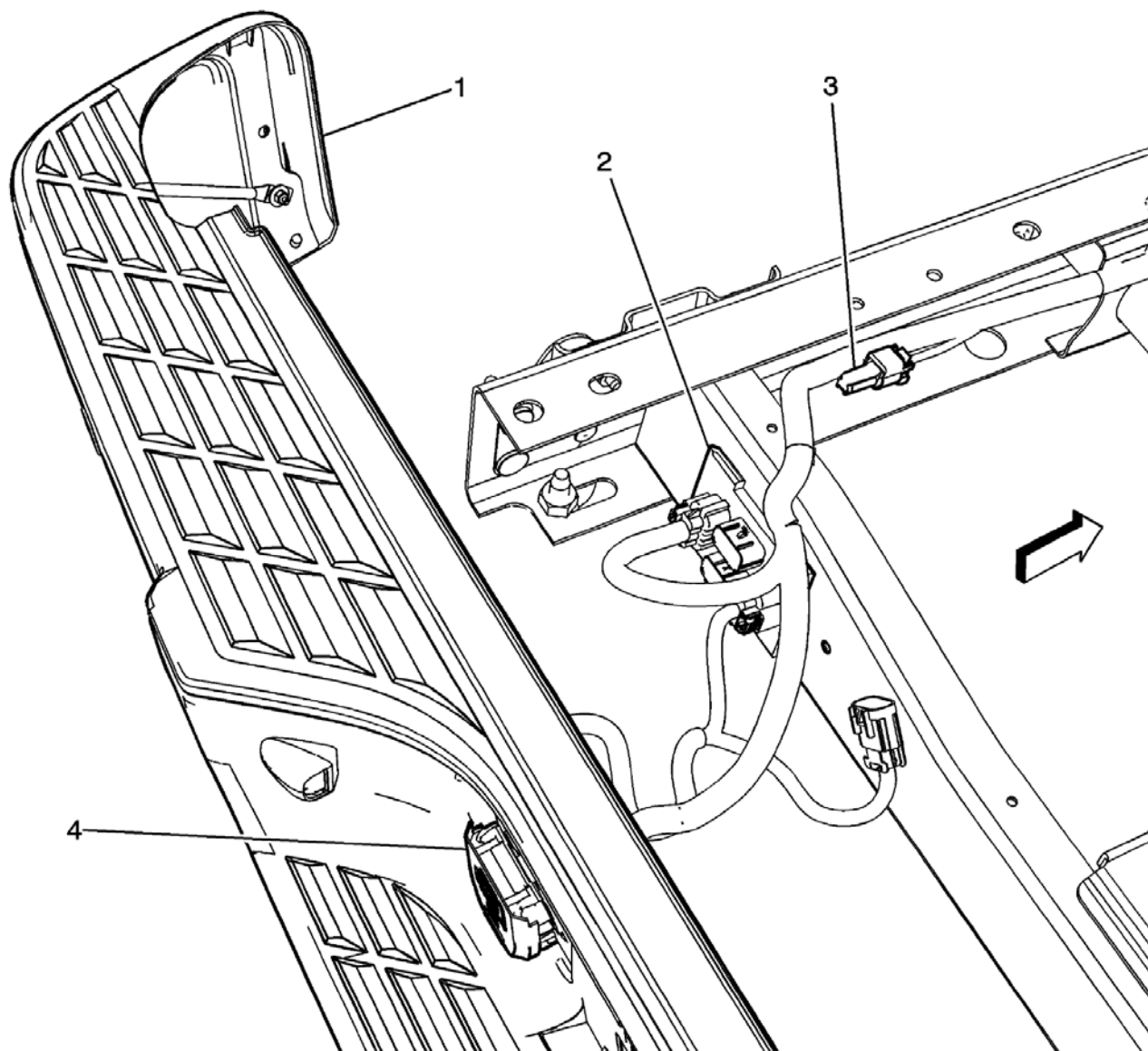
Release Tool/Test Probe: 15315247/J-35616-4A (PU)



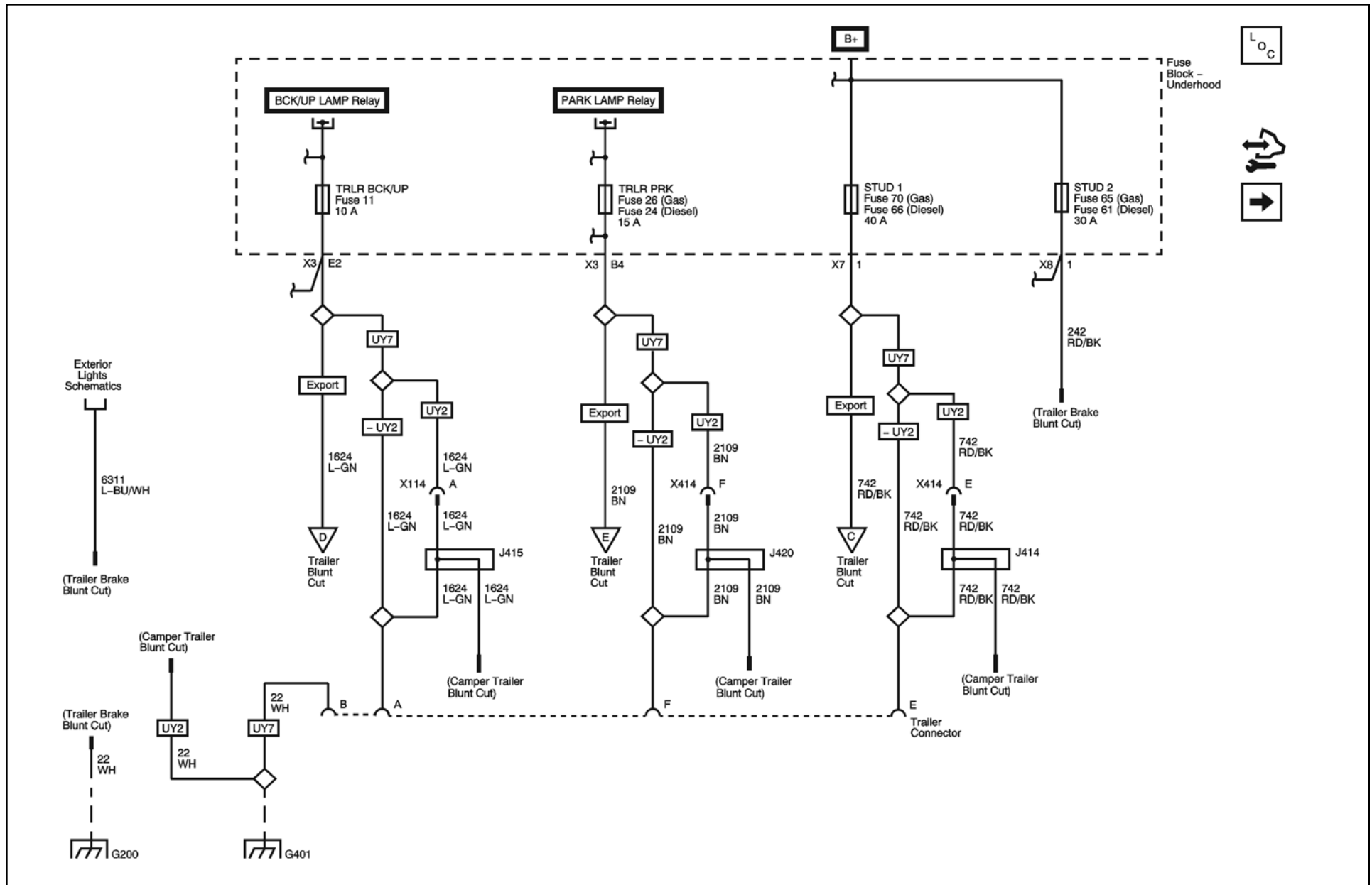
| Trailer Connector |            |             |                                                  |
|-------------------|------------|-------------|--------------------------------------------------|
| Pin               | Wire Color | Circuit No. | Function                                         |
| A                 | L-GN       | 1624        | Trailer Backup Lamp Supply Voltage               |
| B                 | WH         | 22          | Ground                                           |
| C                 | D-BU       | 47          | Trailer Auxiliary Supply Voltage                 |
| D                 | D-GN       | 1619        | Trailer Right Rear Turn/Stop Lamp Supply Voltage |
| E                 | RD/BK      | 742         | Battery Positive Voltage                         |
| F                 | BN         | 2109        | Trailer Park Lamp Supply Voltage                 |
| G                 | YE         | 1618        | Trailer Left Rear Turn/Stop Lamp Supply Voltage  |

## Wiring Location

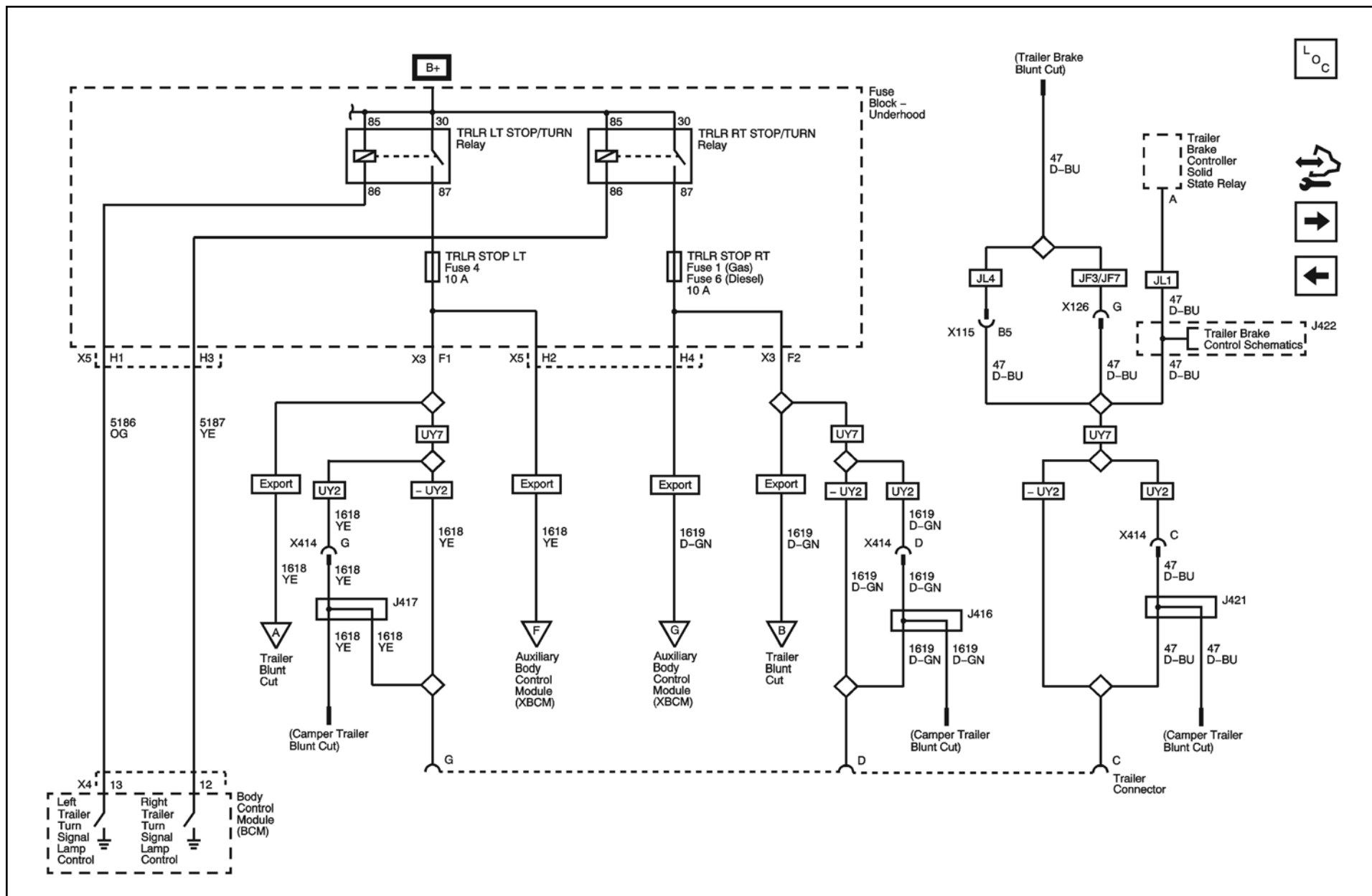
- (1) Rear Bumper
- (2) Junction Block – Rear Lamps
- (3) Terminator Resistor
- (4) Trailer Connector (UY7)



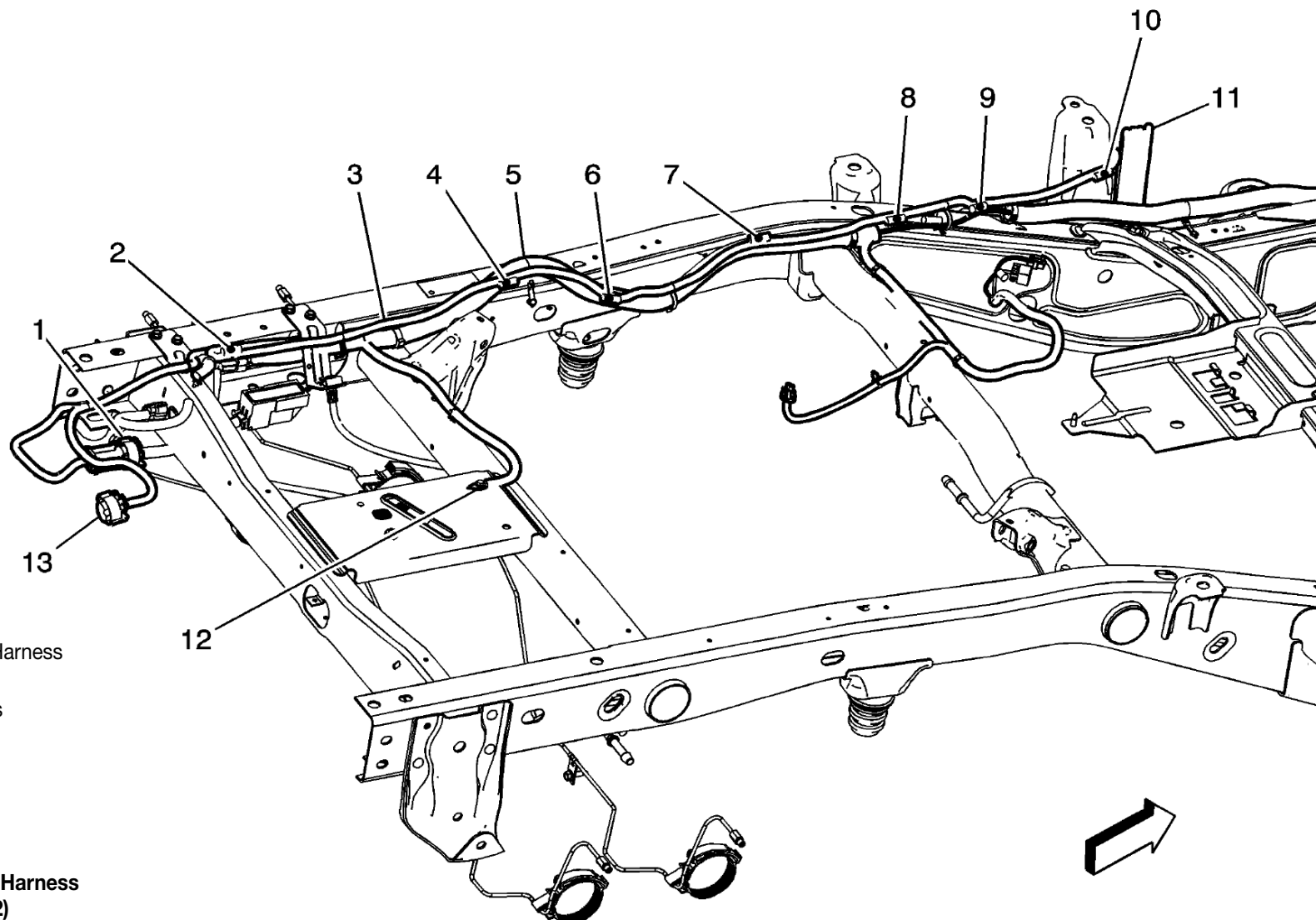
## Trailer/Camper Connector Wiring (1 of 2)



## Trailer/Camper Connector Wiring (2 of 2)



## Trailer/Camper Wiring Location



- (1) X414 (UY2)
- (2) J420 (UY2)
- (3) Camper/Trailer Harness
- (4) J415 (UY2)
- (5) Chassis Harness
- (6) J416 (UY2)
- (7) J417 (UY2)
- (8) J414 (UY2)
- (9) J421 (UY2)
- (10) J410 (UY2)
- (11) **Camper/Trailer Harness  
Blunt Cuts (UY2)**
- (12) G401
- (13) Trailer Connector (UY7)

## Electric Trailer Brake Controller (ITBC) Wiring and Auxiliary 12-V Feed to Trailer

**Applies to the following 2008 Full-Size Utilities and Pickups:**

- 2008 Cadillac Escalade, Escalade ESV, Escalade EXT
- 2008 Chevrolet Avalanche, Silverado, Suburban, Tahoe
- 2008 GMC Sierra, Yukon, Yukon Denali, Yukon XL, Yukon Denali XL

### **The Following Step-by-Step Explanations Describe Installation of an Electric Trailer Brake Controller and Auxiliary 12-Volt Feed to Trailer**

Starting with new 2008 full size utilities and pickups, a separate electric trailer brake controller pigtail harness is no longer provided. The trailer brake controller wiring is now part of the Instrument Panel (IP) wiring harness, and the blunt cut wires are located under the left side of the IP, behind the DataLink connector.

**Note:** *These instructions do not apply to vehicles with Option JL1 (Integrated Trailer Brake Controls) available on 2008 H.D. trucks; or trucks with Option TP2 (H.D. availability) that already have the 12V battery Trailer Feed used as part of the RPO.*

**The explanation on Pages A-4 and A-5 shows how to locate the correct portion of the IP wiring harness and install a typical Trailer Brake Controller in a 2008 Chevrolet Silverado or GMC Sierra Pickup.**

**The explanation and photos on Page A-7 show how to install an Auxiliary 12V Feed to the Trailer in the same vehicles.**

## Installing Electric Trailer Brake Controller Wiring



Figure 1

1. Locate the trailer brake control circuits looped and taped to the main harness under the IP (Fig. 1)

### NOTE

The vehicle owner's manual (page 483) refers to 4 wires, but there are 5 wires looped back in the IP harness. The fifth wire is not required with most systems (see table below).

Match functions: The color of wires that are joined together may not match.

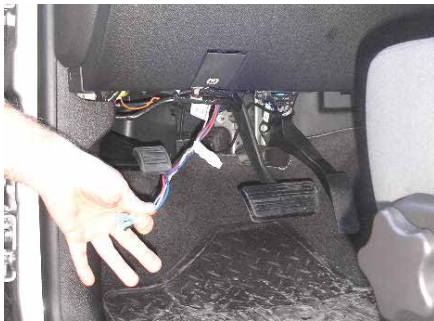


Figure 2

2. Pull the trairing harness wire down (Fig. 2)



Figure 3

3. Match vehicle harness label circuit functions to the trailer brake controller jumper harness functions (Fig. 3)

| Wire Color                   | Circuit # | Function                                                                   |
|------------------------------|-----------|----------------------------------------------------------------------------|
| Dark Blue                    | 47        | Switched power from controller to trailer brakes                           |
| Red with Black Stripe        | 242       | Fused vehicle power to electrical brake controller - 12-volt (30A stud #2) |
| Light Blue with White Stripe | 6311      | Brake switch input to power electric brake controller                      |
| White                        | 22        | Ground                                                                     |
| Orange                       | --        | CHMSL (not required with most systems)                                     |

(continued on next page)

## Installing Electric Trailer Brake Controller Wiring (cont'd)

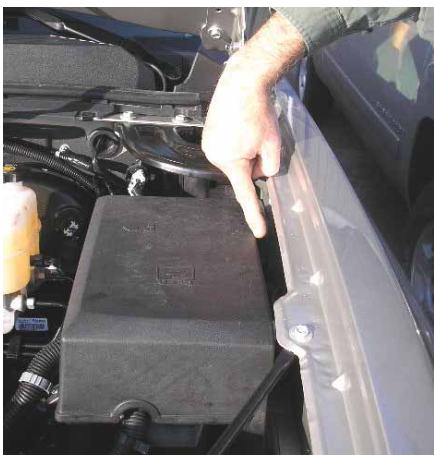


Figure 4

4. After completing the under-IP connections to the electric brake controller, open the hood and locate the red wire taped to the harness between the under-hood electrical center and the driver-side front fender (Fig. 4)



Figure 6

### NOTE



The fuse for the trailer brake controller circuit is factory-installed on the under-hood electrical center (Fig. 6)

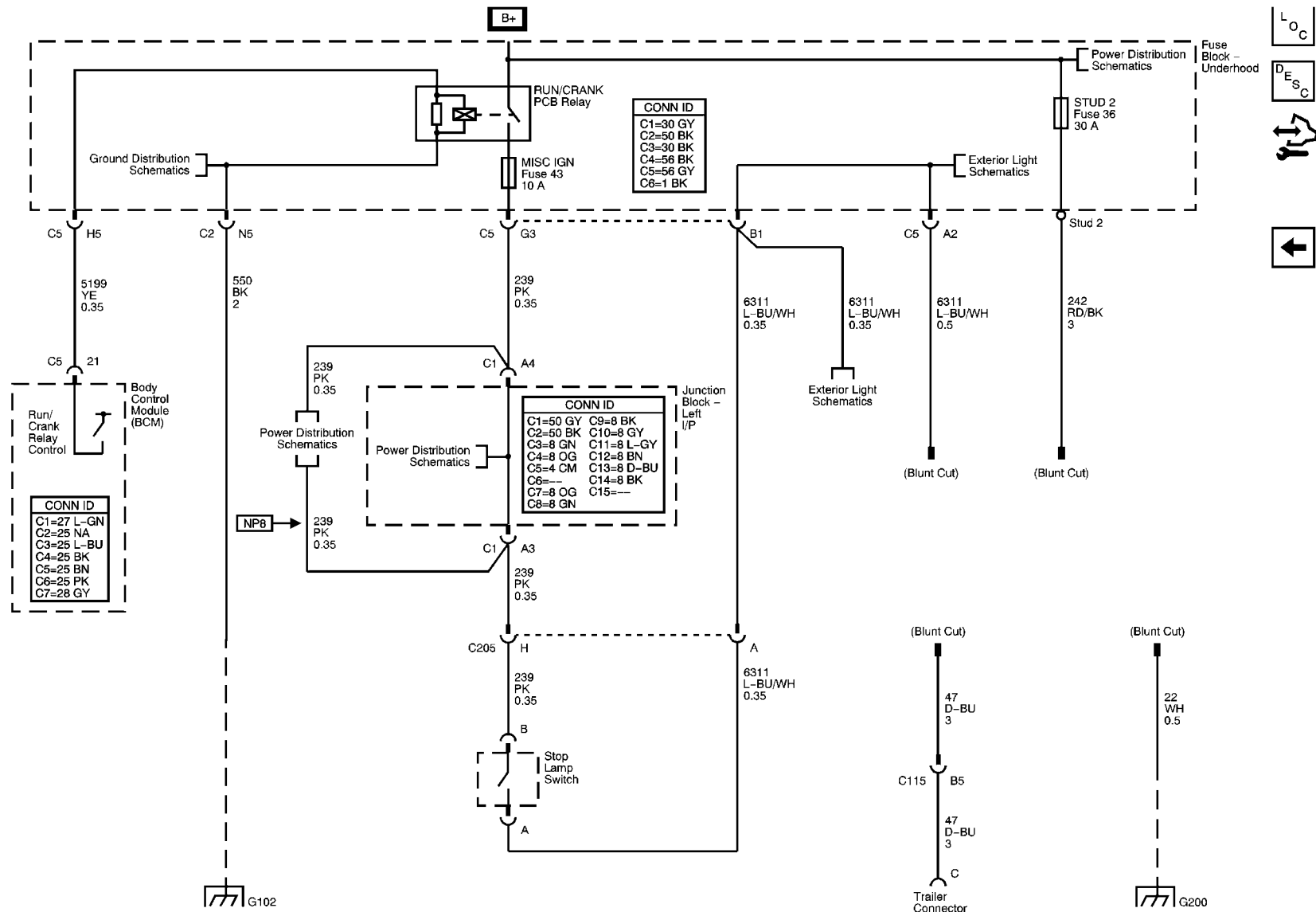


Figure 5

5. Break the tape on the red wire and pull the wire toward the front of the vehicle
6. Remove the cover from the under-hood electrical center
7. Place the terminal on the larger of the two studs at the front of the under-hood electrical center and secure with an M8 nut (Fig. 5)

## Electric Trailer Brake Wiring

### Electric Trailer Brake Wiring Schematic



## Installing Auxiliary 12-Volt Feed to Trailer

### NOTE

This hookup is used to provide power for 12-Volt DC electrical devices in the trailer (example: lights, refrigerator or battery charger).

**Devices powered by this circuit will drain the vehicle's battery if left connected while the engine/alternator is not operating.**

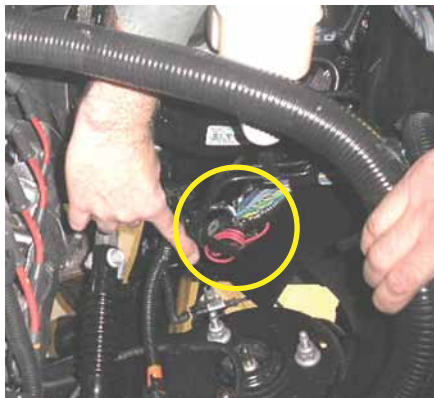


Figure 1

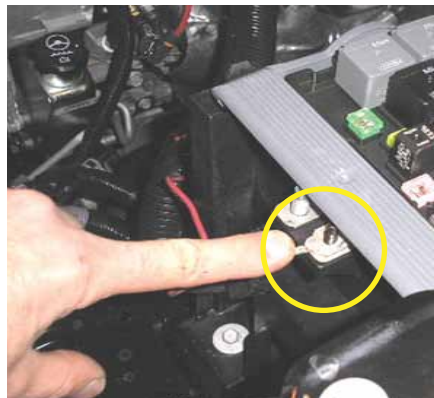


Figure 2

1. Locate the red wire looped and taped to the chassis harness below the brake master cylinder (Fig. 1)
2. Break the tape and route the wire to the front of the vehicle's under-hood electrical center
3. Place the terminal on the smaller of the two studs (Fig. 2) in front of the under-hood electrical center and secure with an M6 fastener

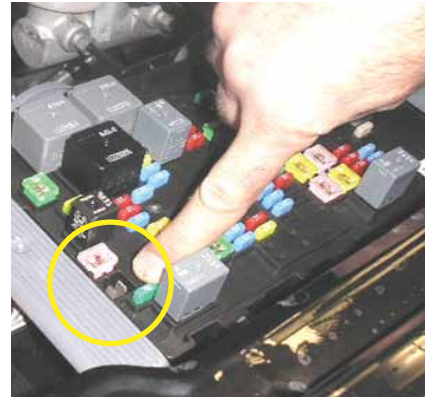


Figure 3

4. Install a 40-amp fuse to power the circuit (Fig. 3)

## Integrated Trailer Brake Control (ITBC) Description & Operation – Option JL1

This vehicle may be equipped with a Trailer Brake Control (TBCM) system for electric trailer brakes. The power output to the trailer brakes is based on the amount of brake pressure being applied in the vehicles brake system. The available power output to the trailer brakes can be adjusted to a wide range of trailering situations.

**Important:** Connecting a trailer that is not compatible with the ITBC system may result in reduced or complete loss of trailer braking. There may be an increase in stopping distance or trailer instability which could result in personal injury or damage to your vehicle, trailer, or other property. An aftermarket controller may be available for use with trailers with surge, air or electric-over-hydraulic trailer brake systems. To determine the type of brakes on your trailer and the availability of controllers, check with your trailer manufacturer or dealer.

**Important:** If your vehicle is equipped with an ITBC, the blunt cuts exist, but are not connected further in the harness. If you install an aftermarket trailer brake controller, the ITBC must be disconnected. Do not power both ITBC and aftermarket controllers to control the trailer brakes at the same time.

The vehicle is equipped with the following trailer braking components:

- Manual Trailer Brake Apply
- Trailer Gain Adjustment
- Trailer Brake Control Panel
- Trailer Brake DIC Display

### Manual Trailer Brake Apply

The Manual Trailer Brake Apply Lever is located on the Trailer Brake Control Panel, and is used to apply the trailer electric brakes independent of your vehicle brakes. This lever is used in the Trailer Gain Adjustment Procedure to properly adjust the power output to the trailer brakes. Sliding the lever to the left will apply only the trailer brakes. The power output to the trailer is indicated in the Trailer Brake Display Page in the DIC. If your vehicle service brakes are applied while using the Manual Trailer Brake Apply Lever, the trailer output power will be the greater of the two.

The trailer and the vehicle brake lamps will come on when either vehicle braking or manual trailer brakes are applied.

### Trailer Gain Adjustment

Trailer Gain should be set for a specific trailering condition, and must be adjusted any time vehicle loading, trailer loading or road surface conditions change.

Setting the Trailer Gain properly is needed for the best trailer stopping performance. A trailer that is over-gained may result in locked trailer brakes. A trailer that is under-gained may result in not enough trailer braking. Both of these conditions may result in poorer stopping and stability of the vehicle and trailer.

*(continued on next page)*

## Integrated Trailer Brake Control (ITBC) Description & Operation – Option JL1 (cont'd)

### Trailer Gain Adjustment (cont'd)

After the electrical connection is made to a trailer equipped with electric brakes, the **TRAILER CONNECTED** message will be momentarily displayed on the DIC. The Trailer Brake Display Page will appear on the DIC showing **TRAILER GAIN** and **OUTPUT**, after all vehicle related service messages are acknowledged by the driver. The dashed lines in the **TRAILER OUTPUT** display signifies a disconnected trailer or TBCM fault condition, and will disappear only when the TBCM fault condition is not present.

**Important:** Trailer wheel lock-up may not occur if towing a heavily loaded trailer. In this case, adjust the trailer gain to the highest allowable setting for the towing condition.

- Adjust trailer gain in 0.5 step increments up to 10 gain setting by using the gain adjustment +/- buttons on the trailer brake control panel switch. Pressing and holding a gain button will cause the trailer gain to continuously increment or decrement. To turn the output to the trailer off, set the gain to zero.
- Drive the tow vehicle and trailer combination on a level road surface representative of the towing condition, and free of traffic at approximately 32-40 km/h (20-25 mph) and fully apply the manual trailer brake apply lever mechanism located on the trailer brake control panel switch. Adjusting trailer gain at slower speeds may result in an incorrect gain setting.
- Adjust the trailer gain to just below the threshold of trailer wheel lock-up.

### Trailer Brake Control Panel

The TBCM system has a control panel with the trailer gain and manual apply switches, and is located on the instrument panel to the left of the steering column. See Instrument Panel Overview for more information on location. The control panel and switches allows you to adjust the amount of output, referred to as trailer gain, available to the electric trailer brakes and allows you to manually apply the trailer brakes. The Trailer Brake Control Panel, and switches is used along with the Trailer Brake Display Page on the DIC to adjust and display power output to the trailer brakes.

### Driver Information Indicators and Messages

The following indicators are used to inform the driver of several different factors:

#### TRAILER CONNECTED

This message will be briefly displayed when a trailer with electric brakes is first connected to the vehicle. This message will automatically turn off in about ten seconds. The driver can also acknowledge this message before it automatically turns off.

*(continued on next page)*

## Integrated Trailer Brake Control (ITBC) Description & Operation – Option JL1 (cont'd)

### CHECK TRAILER WIRING

This message will be displayed if:

- The ITBC system first determines connection to a trailer with electric brakes and then the trailer harness becomes disconnected from the vehicle. If the disconnect occurs while the vehicle is stationary, this message will automatically turn off in about thirty seconds. This message will also turn off if the driver acknowledges this message off or if the trailer harness is re-connected. If the disconnect occurs while the vehicle is moving, this message will continue until the ignition is turned off. This message will also turn off if the driver acknowledges this message off or if the trailer harness is re-connected.
- There is an electrical fault in the wiring to the electric trailer brakes. This message will continue as long as there is an electrical fault in the trailer wiring. This message will also turn off if the driver acknowledges this message off. To determine if the electrical fault is on the vehicle side or trailer side of the trailer wiring harness connection, do the following:
  1. Disconnect the trailer wiring harness from the vehicle.
  2. Turn the ignition OFF.
  3. Wait ten seconds, then turn the ignition back to RUN.
  4. If the **CHECK TRAILER WIRING** message re-appears, the electrical fault is on the vehicle side. If the **CHECK TRAILER WIRING** message only re-appears when you connect the trailer wiring harness to the vehicle, the electrical fault is on the trailer side.

### SERVICE TRAILER BRAKE SYSTEM

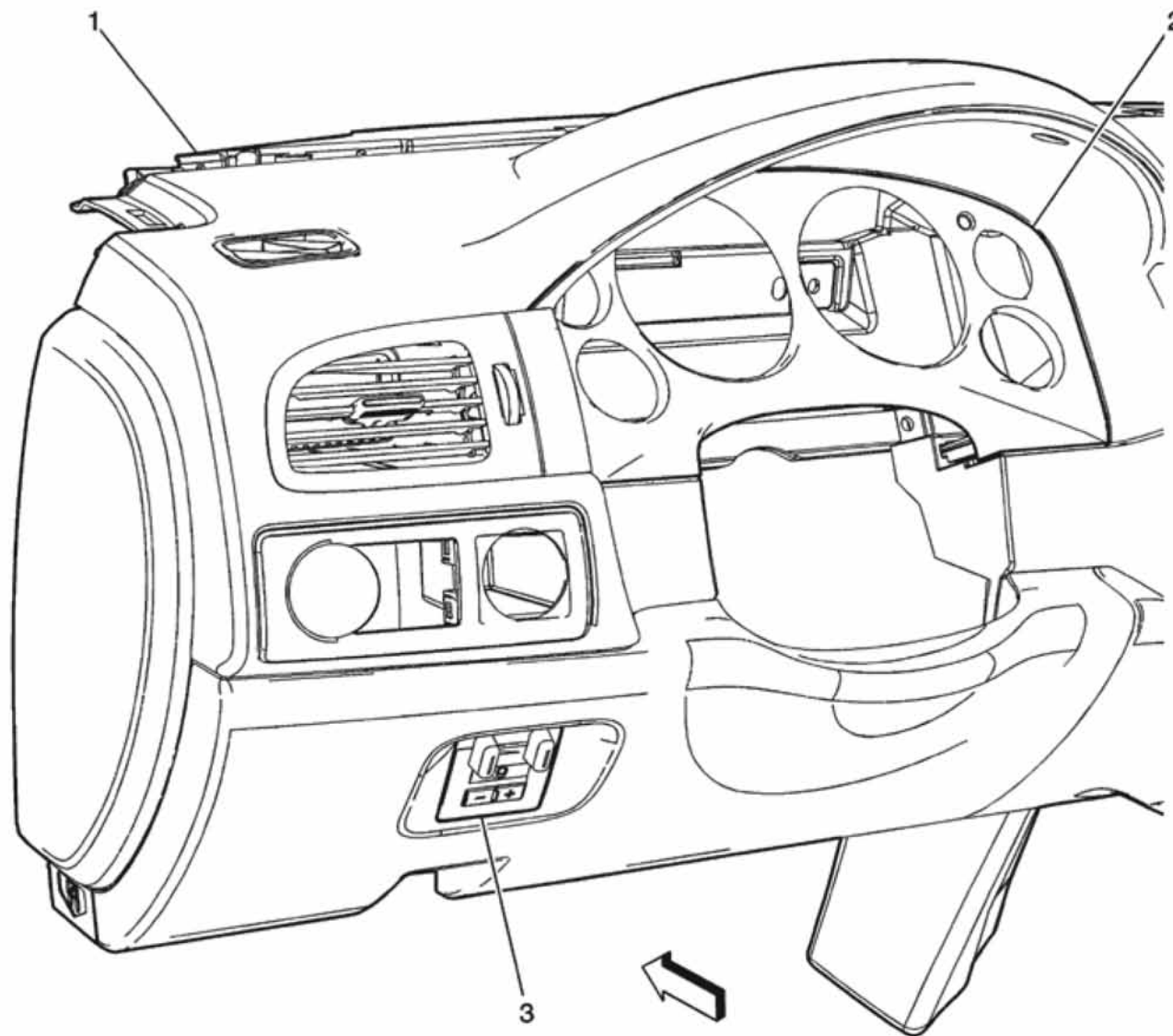
This message will be displayed when there is a problem with the TBCM system. If this message persists over multiple ignition cycles there is problem with the TBCM system. Take your vehicle to an authorized GM dealer to have the TBCM system diagnosed and repaired.

### TRAILER GAIN and OUTPUT Display

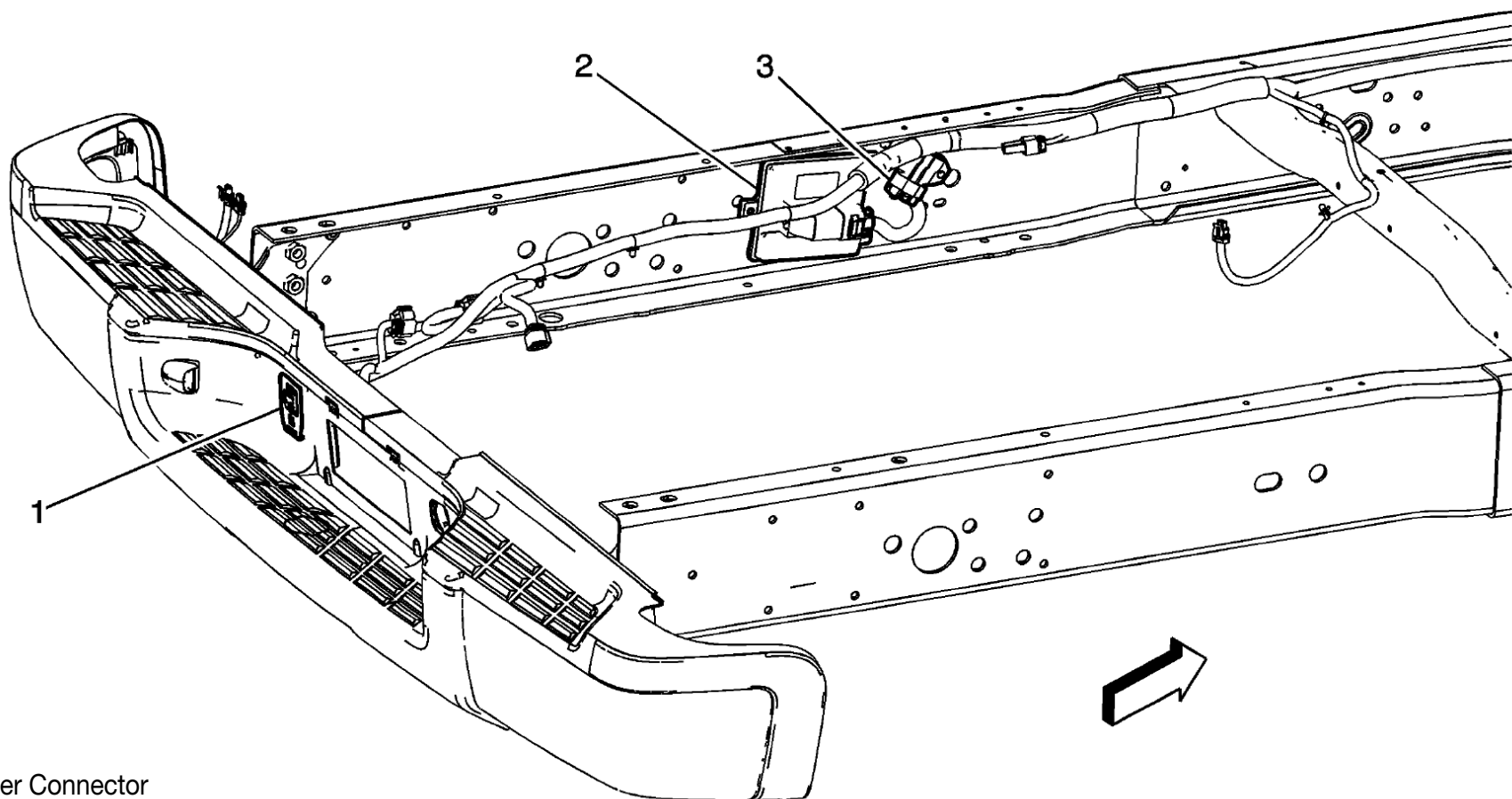
This display menu can be accessed by scrolling through the DIC vehicle Information menu, or any time the trailer gain +/- button is depressed, or the manual trailer brake apply lever is actuated. The trailer gain display is 0 to 10 in 0.5 step increments, and indicates the current user setting of the trailer output gain. The trailer output is 0 to 10 bars in 1 bar increments, and indicates the output power provided to the trailer brakes, relative to the gain setting.

## Trailer Brake Controller Switch Location

- (1) I/P Trim
- (2) I/P Cluster Trim
- (3) Trailer Brake Controller Switch



## Trailer Brake Controller Module (TBCM) Location



- (1) Trailer Connector
- (2) Trailer Brake Controller Module (TBCM)
- (3) Trailer Brake Controller Solid State Relay

## **Automatic Transmission Shift Lock Control**

### **Description and Operation**

The automatic transmission shift lock control system is a safety device that prevents an inadvertent shift out of PARK when the engine is running. The driver must press the brake pedal before moving the shift lever out of the PARK position. The system consists of the automatic transmission shift lock solenoid (serviced as the automatic transmission shift lock actuator), as well as the Body Control Module (BCM) and Engine Control Module (ECM). The shift lock solenoid is located within the steering column assembly.

The BCM controls the voltage supply circuit of the shift lock control solenoid. The following conditions must be met before the BCM will supply voltage to the shift lock control solenoid:

- The ignition is in the ON position.
- The ECM sends an input via GMLAN serial data to the BCM indicating the transmission is in the PARK position.
- The BCM determines the brake pedal is not applied according to the stop lamp switch.

Since the shift lock control solenoid is permanently grounded, the BCM supplies voltage to the automatic transmission shift lock control solenoid, mechanically locking the shift lever in the PARK position as the solenoid energizes. When the brake pedal is applied, the BCM turns the control voltage output of the shift lock control solenoid OFF, de-energizing the shift lock control solenoid. The de-energized solenoid releases the mechanical lock allowing the driver to move the shift lever out of the PARK position. When the transmission is out of the PARK position, the shift lock control solenoid remains de-energized.

During remote start operation the BCM will energize the shift lock control circuit, locking the shift lever in the PARK position.

## Cruise Control and/or PTO Inoperative

***This copy excerpted from GM PI #PIT3051B (09/08/2006)***

### **Cruise Control and/or PTO Inoperative - keywords engage lamp light #PIT3051B - (09/08/2006)**

**Models:** 2003-2007 Chevrolet Silverado Classic  
2003-2007 GMC Sierra Classic  
2003-2007 Chevrolet Express Van  
2003-2007 GMC Savana Van  
1 Ton Vehicles Only

**This PI has been updated to add additional Model Years.  
(Please discard PIT3051A).**

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

#### **Condition/Concern:**

Some customers may state that the Cruise Control and/or the Power Take Off Unit (PTO) may be in-op. If the vehicle was originally equipped with a Center High Mount Stop Lamp (CHMSL) assembly and the vehicle is a cut away or has been modified. It is possible that the CHMSL was removed or was ordered with CHMSL delete option (RPO TS9).

#### **Recommendation/Instructions:**

Install a 330 ohm 3/4 watt resistor in place CHMSL connector. If a connector is not available. Place the resistor between circuit 17 and secure the other end of the resistor to ground and tape to harness.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.



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GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.

## Diesel Particulate Filter

### Diesel Particulate Filter

Your vehicle has a Diesel Particulate Filter (DPF) as part of the exhaust system to reduce vehicle emissions. The DPF requires a unique exhaust tailpipe with an exhaust cooler. The exhaust cooler mixes air with the exhaust at the tailpipe. This lowers the exhaust temperature before it leaves the tailpipe.

The DPF, the tailpipe, or other exhaust system components must not be altered. The area where the exhaust cooler connects to the tailpipe should be inspected, especially the area where the fresh air enters the cooler. Make sure the openings are not restricted or plugged with mud or dirt which could inhibit exhaust gas cooling. See *"Exhaust System Inspection"* under *At Least Once a Year*.

The DPF will regenerate (self-clean) itself as part of normal operation. The Engine Control Module (ECM) controls this function based on several factors including the amount of fuel consumed, hours of engine operation and miles driven. On average, the DPF will clean itself about once per tank of fuel.

**Notice: Use of diesel fuel other than Ultra Low Sulfur Diesel (15 ppm sulfur maximum) or engine oil other than low ash CJ-4 oil will cause permanent damage to the DPF and related components. This damage would not be covered by your warranty.**

Your DPF equipped vehicle has specific fuel and engine oil requirements. See *What Fuel to Use* and *Engine Oil* to make sure you use the required fuel and engine oil.

**Caution: During DPF regeneration, the exhaust system and exhaust gases are very hot. Things that burn could touch hot exhaust parts under your vehicle and ignite. You or others could be burned. Do not park near or over papers, leaves, dry grass, or other things that can burn.**

If you have a pickup model and the **CLEAN EXHAUST FILTER SEE OWNERS MANUAL NOW** message appears in the Driver Information Center (DIC), the DPF needs to be cleaned. If you have a van model and the engine exhaust gas filter warning light, **CLN EXH FILTER**, comes on, the DPF needs to be cleaned. See *DIC Warnings and Messages* for pickup models, or *Engine Exhaust Gas Filter Warning Light* for van models.

To clean the filter, drive the vehicle above 30 mph (50 km/h) until the warning light/message goes off. This will take about 20 minutes.

**Notice: Extended idle should be avoided because the DPF system is not capable of regenerating at idle. During extended idle, be sure to watch for the DPF warning light/message which could come on to indicate that the DPF is becoming full and needs regeneration. If the light/message comes on, stop the idling and drive the vehicle as described previously to clean the filter. Continued idling with the warning light/message on could cause irreversible damage to the DPF requiring repair and possible replacement that might not be covered by your warranty.**

*(continued on next page)*

## Diesel Particulate Filter (cont'd)

Extended idling in PARK (P) can cause exhaust parts and gases to become very hot. Keep the exhaust area clear of material that could ignite or burn. See *Parking Over Things That Burn* for more information.

The DPF warning light/message comes on when the DPF is dirty and needs regenerating. You will also notice a change in the exhaust sound and engine idle speed. This is normal.

If you continue to drive with the DPF warning light/message on and the exhaust filter is not cleaned as required, the check engine and reduced engine power warning lights will come on and dealer/retailer service is necessary. See *Malfunction Indicator Lamp* and *Reduced Engine Power Light* for more information.

For vehicles with Power Take-Off (PTO), monitor the instrument panel cluster for lights related to the DPF.

All engines consume some amount of engine oil. This is normal. The by-product of combustion of engine oil is ash. The ash will become trapped in the DPF over the life of the vehicle. Eventually, the buildup of ash will restrict the exhaust gases and the DPF will need to be cleaned or replaced.

See *Accessories and Modifications* for important information.

## 12-Volt Power Supply (SEO 9L4)

### Electrical Connections

Your vehicle is equipped with wiring provisions for a 12-volt power supply (SEO 9L4). Refer to the following information when adding electrical accessories that will use the 9L4 12-volt power supply feeds connected to your vehicle's electrical system. After reading the following information, keep it with your owner's manual for future reference.

**Notice: Before modifying or adding any wiring, be sure that it will work properly with your vehicle's wiring system. Because there are so many modifications that can be made for many different bodies and accessories, GM cannot take responsibility for any changes made. Such changes may not be covered by your GM Warranty. Have the work done by an experienced electrical technician. All wiring must be properly protected by fuses, etc. and must be routed properly so that it will not be cut, pinched or rubbed by other parts of the vehicle. Do not route wiring in areas where it will be very hot. Be sure not to overload the vehicle's wiring, connectors and components. All added wire must be at least the same size as the wire being attached to for proper fuse protection.**

### Installation Instructions – 12 Volt Accessory Power Supply

1. Disconnect the battery negative (-) cable at the battery. The negative (-) battery cable must be disconnected before the positive wiring lead is connected to the power accessory.
2. Locate the power supply harness under the instrument panel near the center of the vehicle. The wire bundle consists of six blunt cut wires, two red/white (battery hot), two black (ground), one light green (Ign hot) and one light blue (Ign hot).

3. Remove the tape to release the wire bundles from the power supply harness.
4. The IGN A and IGN B wires have voltage supplied and are HOT when the ignition is turned to ACC, RUN or RAP (Retained Accessory Power).

The BAT A and BAT B wires have direct voltage supplied and are HOT at all times.

The combined electrical load of IGN A and BAT A must not exceed 21 amps (250 watts). Additionally, the combined electrical load of IGN B and BAT B must not exceed 21 amps (250 watts). The combined electrical load of all circuits must not exceed 42 amps (500 watts).

5. Prepare the wires that are to be used to connect the power accessory. Do not remove the unused wires. Tape unused wires back in their original position under the instrument panel.
6. Complete the wiring installation of the customer added accessory with additional wire required for the specific electrical accessory power connection. The wire gage, 12 gage (3.0 mm<sup>2</sup>), should be the same as the wiring of the installed harness.
7. The ignition must be turned to OFF or ACC prior to attaching the cables to the battery, or serious damage to the Vehicle Control Module (VCM) may result.  
  
The windshield wiper switch and the radio must be turned off before attaching cables to the battery.
8. Reconnect the battery negative (-) cable to the battery. Torque the bolt to 3.7 lb-ft. (5 N·m).
9. Reset the clock time and radio pushbuttons as desired.

## LED or Additional Turn Signals

### LED or Additional Turn Signals

Amber turn lamps on the NEW C/K Trucks are only used on the front of the vehicle. Rear lamps are combined stop/turn (red). Turn signals are controlled by the BCM. No flasher module is used. Adding additional bulbs will cause the BCM output to shut down resulting in no flashing. Replacing the front turn lamps with LED's will result in a rapid flash rate. This FMVSS required lamp outage detection is due to the change in lamp current through the BCM.

Two relays (left and right) need to be added for additional or LED turn signals. Power for the relays needs to go back to the UBEC. Turn signals are available at the forward lamp connectors. Information on these connectors is shown in Section C of the Utility Body Builders manual shown on the Upfitters website. The address of the manual is:

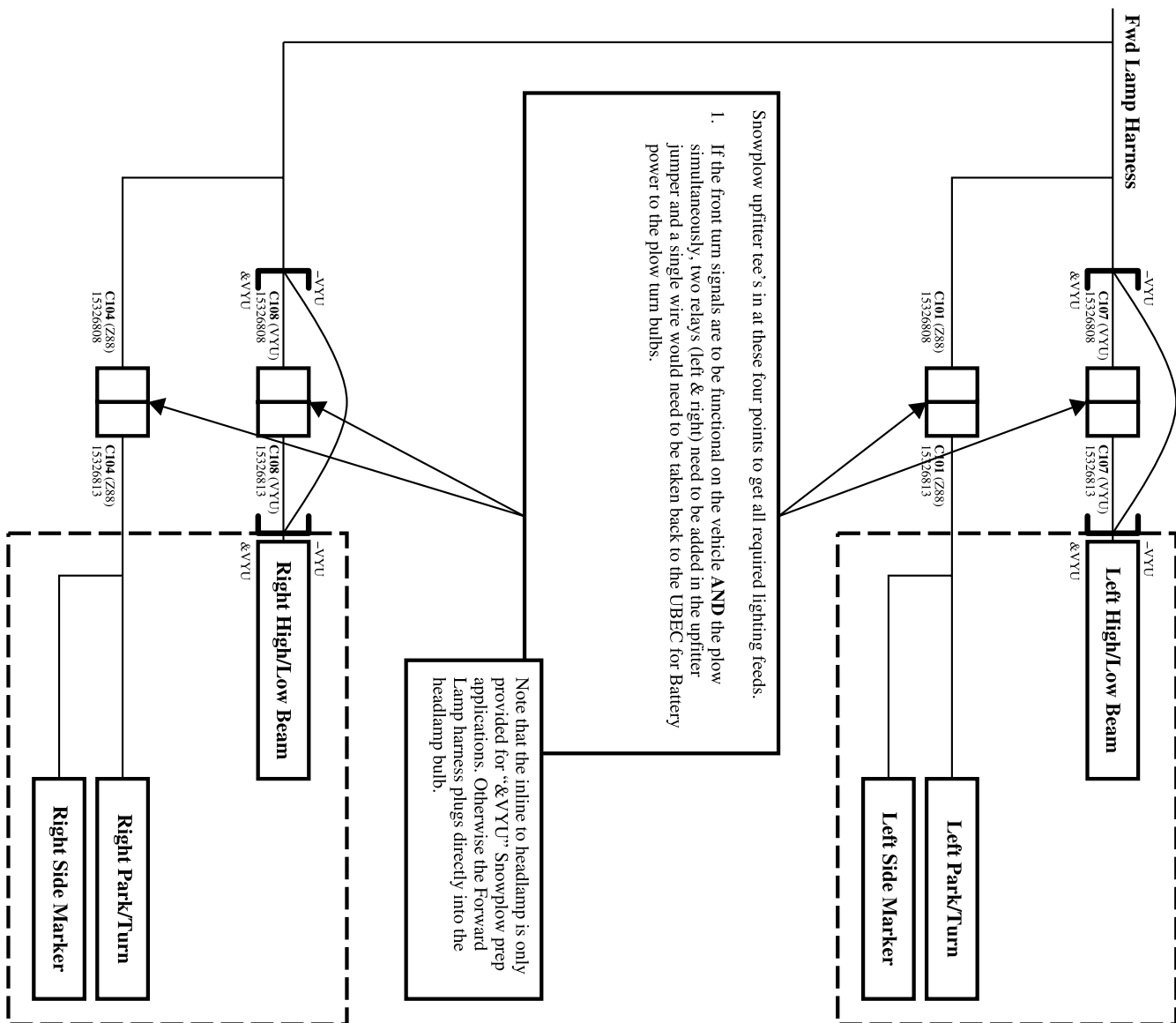
[http://www.gmupfitter.com/publicat/2007\\_BB/2007\\_LD\\_FS\\_CK\\_Utility\\_Elec.pdf](http://www.gmupfitter.com/publicat/2007_BB/2007_LD_FS_CK_Utility_Elec.pdf)

Chevrolet Silverado and GMC Sierra Pickup forward light circuits are identical. They are similar to the Chevrolet SUV but lack the separate DRL lamps of the SUV. Daytime Running Lights are accomplished by reduced intensity headlamps. The Pickups use the same connectors as the Chevy SUV. C100 and C106 are shown on pages C-6 and C-9 of the Utility manual. There is no additional connector for the VYU (Snowplow) option. Requirements for Snowplows are shown. Adding additional lights or LED's have the same vehicle wiring requirements.

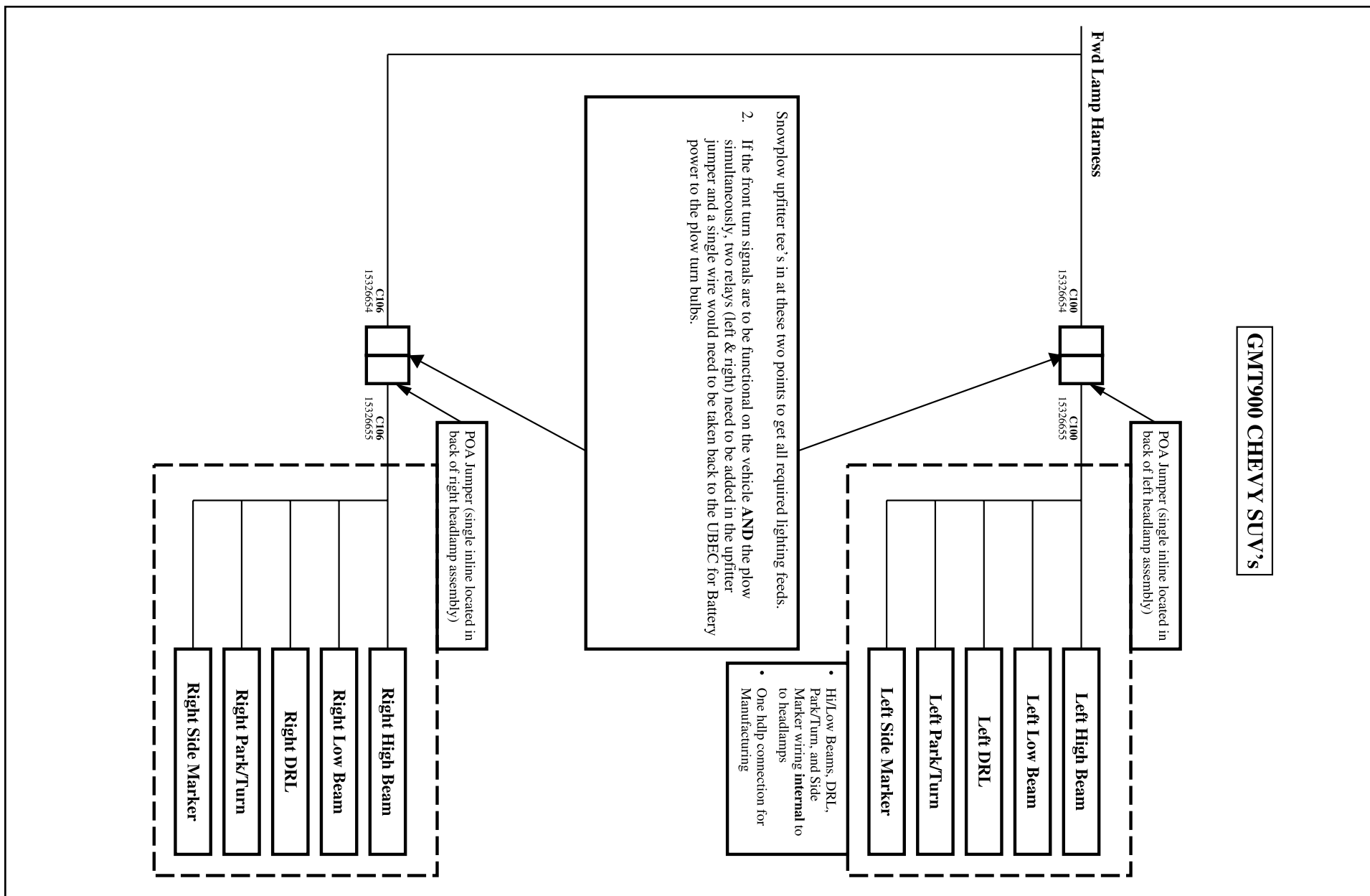
**Note: The truck will not have Lamp (or LED) outage detection. Although the life of high-quality LED's are substantially longer than the bulbs they replace, it is the upfitter's responsibility for making this modification.**

## Additional Turn Signals – GMC Yukon (Z88)

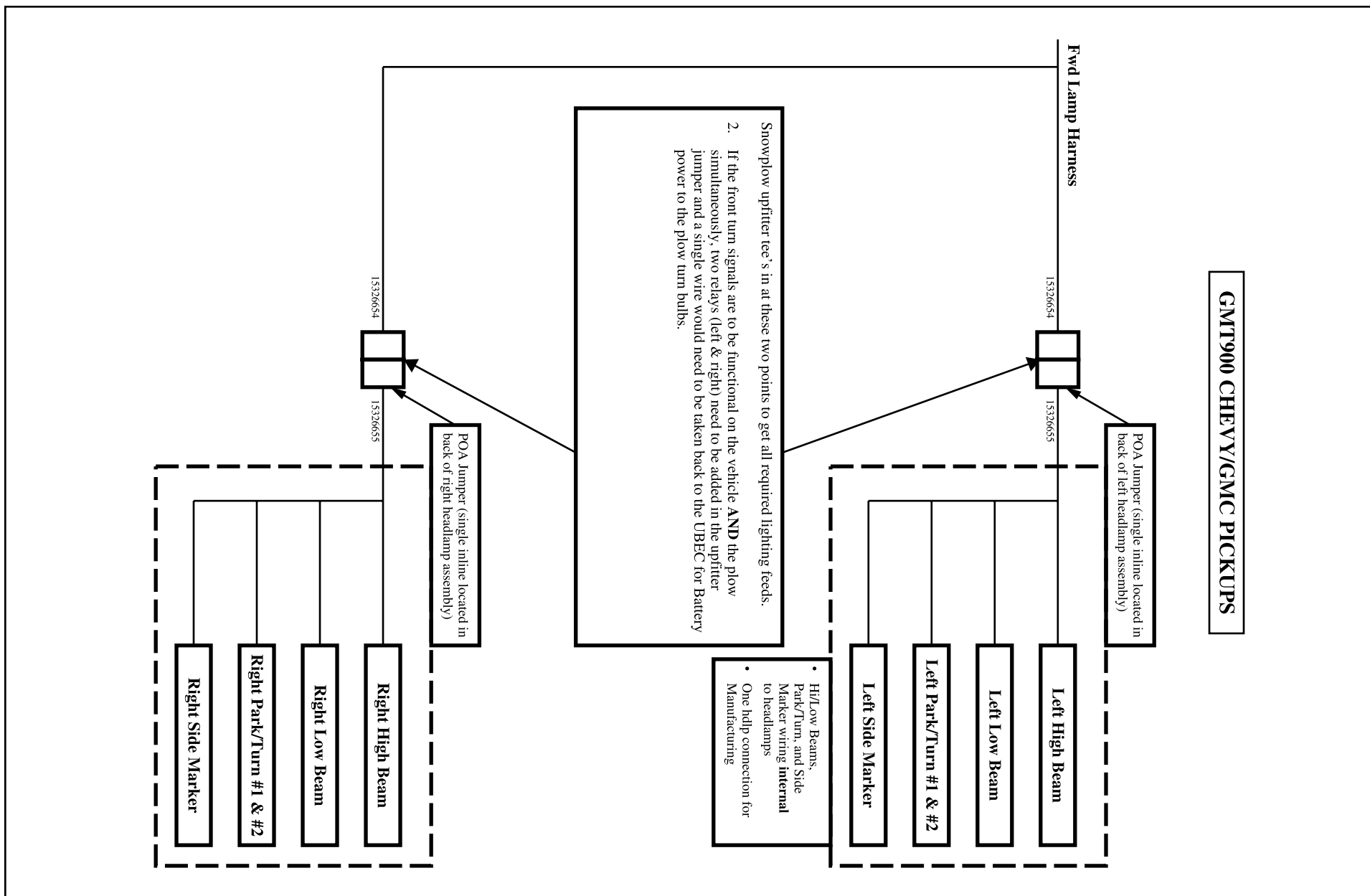
### GMT900 GMC SUV's



## Additional Turn Signals – Chevrolet Tahoe & Suburban (X88)



## Additional Turn Signals – Chevrolet & GMC Pickups



## Service Body Rear Lighting Options (including LED)

***This copy excerpted from GM UI Bulletin #81 (04/17/2007)***

The address of the UI Bulletin #81 (and the accompanying Upfitter addendum #07-08-442-006) is:

[http://www.gmupfitter.com/publicat/bull/63135\\_Bulletin\\_81\\_D3.pdf](http://www.gmupfitter.com/publicat/bull/63135_Bulletin_81_D3.pdf)

### **Service Body Lighting Options (including LED)**

**Models Affected:** All New C/K Chevrolet Silverado and GMC Sierra, 3500 Series Heavy Duty Chassis Cab, Pickups with Box Delete Option (RPO ZW9) and, Models Approved for Pickup Box Removal

#### **SUMMARY**

- Chassis Cab & ZW9 box delete option models will work with LED or any other turn signals without modification.
- Tail lamp alteration of a regular truck (i.e. deleting Pickup box w/o ZW9) needs to have the BCM calibration changed if LED's or single bulb lamps are used. This must be done at a dealer.

Service Bulletin (Document ID# 1956334) describes how the dealer can change the BCM calibration.

**Notes:** This bulletin addresses the "All New" not the "Classic" C/K truck.

FMVSS 108 / CMVSS 108 compliance is the responsibility of the upfitter.

#### **Significant points are as follows:**

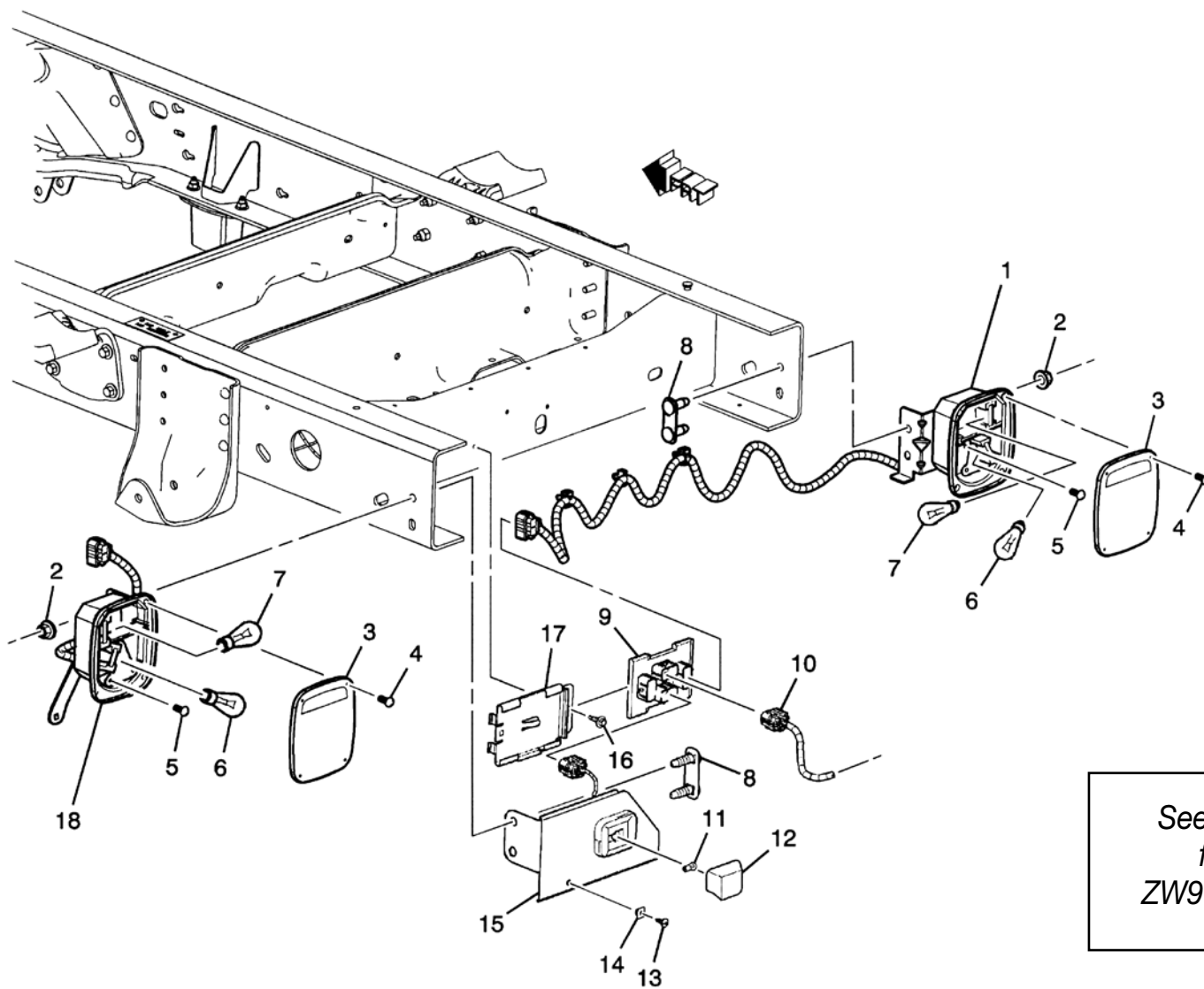
- The Turn Signals are controlled by the BCM not a separate flasher module.
- Rear Lamp Bulb Outage detection is displayed as a "fast" turn signal flash rate in the cluster.
- All trucks are built with one of two BCM calibrations:
  - All "regular" C/K trucks - 2 Bulb Outage Detection
  - All Chassis Cabs & ZW9 box delete option – No Bulb Outage Detection. This may be used for LED turn signals with a standard flash rate.
  - Note: No calibration presently exists for Single Bulb Lamp Outage Detection.
- The BCM is current limited to 6A. The BCM output (& lamps) will turn off if this is exceeded.
- The "All New" C/K trucks have combined "red" stop/turn signal lamps.
- Adding additional turn only (Amber) signals are described in the Body Builders Manual.



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## Service Body Rear Lighting Options – Pickup Box Delete (ZW9)



TC02-948 07/13/2007

## Preface: Support Information

### •Acronyms

- 2WD = Two Wheel Drive
- 4WD = Four Wheel Drive
- A/D = Analog to Digital
- AIR = Air Injection Reaction
- ACCY = Accessory
- AMP = Amplifier or "Current"
- ANLG = Analog
- A/V = Audio/Video
- ABS = Antilock Brake System
- AOS = Auxiliary Occupant Sensing
- ASM = Assembly
- AUX = Auxiliary
- AWD = All Wheel Drive
- BASS = Brake Apply Sensing System
- BATT = Battery
- BCM = Body Control Module
- BEC = Bussed Electrical Center
- BOT = Bottom Of Travel
- CHMSL = Center High Mounted Stop Lamp
- CTSY = Courtesy
- DDM = Driver Door Module
- DIC = Driver Information Center
- DLC = Diagnostic Link Connector
- DLIS = Discrete Logic Ignition Switch
- DOD = Displacement On Demand
- DR = Door
- DRL = Daytime Running Lamps
- DVC = Dual Voice Coil
- DVD = Digital Versatile Disc
- E85 = Ethanol 85%
- EAP = Electric Adjustable Pedals
- ECC = Electronic Climate Control
- ECM = Engine Control Module
- EGR = Exhaust Gas Recirculation
- EHPS = Electro-Hydraulic Power Steering
- EK = Easy Key
- EOSS = Engine Output Speed Sensor
- ESD = Electro Static Discharge
- ETC = Electronic Throttle Control
- EV = Electro-Viscous
- EXP = Export
- EXT = External or Exterior
- FREQ = Frequency
- FRT = Front
- FTP = Flash To Pass
- GMHS = GM High Speed LAN
- GMLS = GM Low Speed LAN
- GND = Ground
- GPM = Glow Plug Module
- GPS = Global Positioning System
- HCM = Hybrid Control Module

### •Acronyms (continued)

- HDI = High Discrete Input
- HDLP = Headlamp
- HID = High Intensity Discharge
- HSD = High Side Drive
- HVSM = Heated/Vented Seat Module
- HVAC = Heat Vent Air Condition
- IAH = Intake Air Heater
- IAT = Intake Air Temperature
- INC DIM = Incandescent Dimming
- IND DIM = Indicator Dimming
- IPC = Instrument Panel Cluster
- IR = Infrared
- ISRVIM = Inside Rear View Mirror
- LBEC = Left BEC
- LDI = Low Discrete Input
- LF = Left Front
- LED = Light Emitting Diode
- LED DIM = LED Dimming
- LGM = Liftgate Module
- LH = Left Hand
- LIN = Linear Interconnect Network
- LOMA = Lifter Oil Manifold Assembly
- LPM = Linear Power Module
- LR = Left Rear
- LSD = Low Side Drive
- MAF = Mass Air Flow
- MAP = Manifold Absolute Pressure
- MAT = Manifold Air Temperature
- MBEC = Mid BEC
- MDD = Medium Duty Dual Side Clutch
- MDL = Module
- MOV = Metal Oxide Varistor
- MR = Magneto-Rheological
- MSM = Memory Seat Module
- MTR = Motor
- NC = Normally Closed
- NO = Normally Open
- OSRVIM = Outside Rear View Mirror
- PAS or PASS = Passenger
- PCP = Pre-Charge Pump
- PDM = Passenger Door Module
- PD = Pull Down
- POA = Part Of Assembly
- PPM = Pulse Per Minute
- PPS = Pedal Position Sensor
- PRNDL = Park Reverse Neutral Drive Low
- PSIR = Passenger SIR
- PTC = Positive Temperature Coefficient
- PTO = Power Take Off
- PTR = Powertrain Relay
- PU = Pull Up

### •Acronyms (continued)

- PWM = Pulse Width Modulation
- PWR = Power
- R/C = Run/Crank
- RAP = Retained Accessory Power
- RF = Right Front
- RFA = Remote Function Actuator
- RH = Right Hand
- RHBLK = Right Hand Block (Bussing)
- RPO = Regular Product Option
- RR = Right Rear
- RRBLK = Rear Block (Bussing)
- RSA = Rear Seat Audio
- RSE = Rear Seat Entertainment
- RTD = Real Time Damping
- RVC = Regulated Voltage Control
- RWS = Rear Wheel Steer
- SBAT = Switched Battery
- SDARS = Satellite Digital Audio Radio Services
- SDM = Sensing & Diagnostic Module
- SENS = Sensor or Sensing
- SEO = Special Equipment Option
- SIR = Supplemental Inflatable Restraint
- SNRF = Sunroof
- SRC = Source
- STRG = Steering
- SW = Switch
- SWC = Steering Wheel Controls
- TCM = Transmission Control Module
- TED = Thermal Electrical Device (Platinum Cupholders)
- TISS = Transmission Input Speed Sensor
- TOSS = Transmission Output Speed Sensor
- TOT = Top Of Travel
- TPS = Throttle Position Sensor
- TRLR = Trailer
- TURSS = Turbine Speed Sensor
- TUTD = Tap Up Tap Down
- UBEC = Underhood BEC
- UGDO = Universal Garage Door Opener
- UPA = Ultrasonic Park Assist
- VAR = Variable
- VASS = Vehicle Access & Starting Security
- VHSS = Variable Height Suspension System
- VNC = Vehicle Noise Control
- VSES = Vehicle Stability Enhancement System
- WFHS = Washer Fluid Heating System
- WIF = Water In Fuel
- WUA = Wake Up Analog
- WUD = Wake Up Dual Edge
- WUF = Wake Up Falling Edge
- WUR = Wake Up Rising Edge
- XCVR = Transceiver

ARE16300  
003  
GMT900  
GM Proprietary

Thursday, June 29, 2006  
3:01:45 pm  
IEC/ESI

### Preface: Support Information

1\_08\_0\_info Panel 1 of 4

2008  
GMT900

System Status: Object Status: X

## Preface: Support Information (cont'd)

### •Miscellaneous Information

- C = 2WD
- K = 4WD
- 03 = Regular Cab Pickup
- 43 = Crew Cab Pickup
- 53 = Extended Cab Pickup
- 06 = Utility (Both 706 & 906)
- 706 = Regular Utility
- 906 = Large Utility
- 36 = Ultimate Utility Vehicle (UUV)
- 10 = Series (Pickup/Utility/UUV)
- 20 = Series (Pickup/Utility/UUV)
- 30 = Series (Pickup)
- 31 = Series (Cab Chassis)

### •900 Numbers

- 901 - Light Duty Pickups - Chevy Silverado
- 902 - Light Duty Pickups - GMC Sierra, (GMC Sierra Denali?)
- 911 - Heavy Duty Pickups - Chevy Silverado
- 912 - Heavy Duty Pickups - GMC Sierra, (GMC Sierra Denali?)
- 921 - Utility - Chevrolet Tahoe
- 922 - Utility - GMC Yukon, (GMC Yukon Denali?)
- 926 - Utility - Cadillac Escalade
- 931 - Large Utility - Chevrolet Suburban
- 932 - Large Utility - GMC Yukon XL, (GMC Yukon Denali XL?)
- 936 - Large Utility - Cadillac Escalade ESV
- 941 - Sport Utility Truck - Chevrolet Avalanche
- 946 - Sport Utility Truck - Cadillac Escalade EXT

### •Vehicles by RPO

- 03/43/53 = Chevrolet Silverado / GMC Sierra / GMC Sierra Denali
- 03/43/53&X88 = Chevrolet Silverado
- 03/43/53&Z88 = GMC Sierra / GMC Sierra Denali (43 Only)
- 06 = Cadillac Escalade / Cadillac Escalade ESV / Chevrolet Tahoe / Chevrolet Suburban / GMC Yukon / GMC Yukon Denali / GMC Yukon XL / GMC Yukon Denali XL
- 06&X88 = Chevrolet Tahoe / Chevrolet Suburban
- 06&Z75 = Cadillac Escalade / Cadillac Escalade ESV
- 06&Z88 = GMC Yukon / GMC Yukon Denali / GMC Yukon XL / GMC Yukon Denali XL
- 06&Z88&Y91 = GMC Yukon Denali / GMC Yukon Denali XL
- 36 = Chevrolet Avalanche / Cadillac Escalade EXT
- 36&X88 = Chevrolet Avalanche
- 36&Y91/Z75 = Cadillac Escalade EXT
- 43&Y91 = GMC Sierra Denali
- 43&Y91&Z88 = GMC Sierra Denali
- 706 = Cadillac Escalade / Chevrolet Tahoe / GMC Yukon / GMC Yukon Denali
- 706&X88 = Chevrolet Tahoe
- 706&Y91 = Cadillac Escalade / GMC Yukon Denali
- 706&Y91&Z88 = GMC Yukon Denali
- 706&Z75 = Cadillac Escalade
- 706&Z88 = GMC Yukon / GMC Yukon Denali
- 906 = Cadillac Escalade ESV / Chevrolet Suburban / GMC Yukon XL / GMC Yukon Denali XL
- 906&X88 = Chevrolet Suburban
- 906&Y91 = Cadillac Escalade ESV / GMC Yukon Denali XL
- 906&Y91&Z88 = GMC Yukon Denali XL
- 906&Z75 = Cadillac Escalade ESV
- 906&Z88 = GMC Yukon XL / GMC Yukon Denali XL)

## Preface: Support Information (cont'd)

### •RPOs

- 03 = Regular Cab Pickup
- 06 = Utility (Applicable to both 706 & 906)
- 36 = Ultimate Utility Vehicle (UUV)
- 43 = Crew Cab Pickup
- 53 = Extended Cab Pickup
- 706 = Regular Utility
- 906 = Large Utility
- 5W4 = Special Service Package (4WD Police Package)
- (5W4 contains 6J1, 6J3, 6J4, 6J7, 7X6, 7X7, 9G8, TRW, WX7 & optionally 6A6)
- 5X7 = Provisions - Wrecker Emergency Lamp (SEO)
- 5Y0 = Wiring Provisions Body Builder Emergency Lamp (SEO)
- 6A6 - Dual Battery, 730 CCA
- 6J1 = Power Supply, 100Amp at Dash and Rear Compartment
- 6J3 = Wiring Provisions, Grill Lamp & Speakers
- 6J4 = Wiring Provision, Horn/Siren
- 6J7 = Wiring Provision, Head Lamp & Tail Lamp Flasher
- 7X6 = Spot Lamp, LH
- 7X7 = Spot Lamp, LH & RH
- 7Z1 = Horn - Dual Hight Note (SEO)
- 6A6 - Dual Battery, 600 CCA & 770 CCA (SEO)
- 8S3 = Alarm B/U Electrical 97 Decibels (SEO)
- 8S8 = Wiring Provisions Odometer Security (SEO) {Unused?}
- 8X5 = Generator 105 Amp, Dual (SEO) (w/o YF2)
- 906 = Large Utility
- 9G8 = DRL Delete
- 9L4 = Wiring Provisions 12V Power Supply
- A31 = Window, Electric Operated, Side
- A48 = Window RR Full Width, Sliding, Power
- ABV = Window Power Operated, RR Side Access Drs
- AG1 = Driver Power Seat
- AG2 = Passenger Power Seat
- AL0 = Auxiliary Occupant Sensing (AOS)
- AN3 = Memory Driver Seat
- AP3 = Lock Control, Entry Remote, Keyless Entry, Start
- AP8 = Lock Control, Entry Remote Entry, Extended Range (Remote Start Ready)
- ARS = Power Fold & Tumble 2nd Row Seats
- AS3 (with ASF) = Third Row Roof Rail Airbags
- ASF = Restraint Roof Side, LH & RH, Inflatable
- AU0 = Lock Control Remote Entry
- AU3-YE9 = Base Power Locks
- AZ3 = Seat Frt Split, Driver, Pass, Full Feature Center
- BRS = Retractable Runningboard
- C25 = Wiper/Washer System, Rear Window
- C36 = Heater Auxiliary
- C42 = Manual Heater Only
- C49 = Rear Window Defog
- C67 = HVAC System Air Conditioning FRT Electronic Controls
- C69 = HVAC System RR Air Conditioner
- C99 = Switch Infl Rst I/P Mdl Man Suppression

### •RPOs (continued)

- CE1 = Wiper System Windshield, Pulse, Moisture Sensitive
- CF5 = Roof Sun, Glass, Sliding, Elec
- CJ2 = Dual HVAC System Auto Temp Cont
- CJ3 = Dual HVAC System Man Temp Cont
- D07 = Console Frt Compt, Floor, Custom
- DBL2751 = 2751 Double Ring Terminal
- DD8 = Mirror I/S R/V Electrochromic
- DH6 = Mirror I/S, Visor Vanity, LH & RH Sunshade (ILLUM)
- DL3 = Mirror O/S LH & RH, Rem Cont, Elec, Heat, Pwr Fold, Turn Sig, Electrochromic
- DL8 = Mirror O/S LH & RH, Rem Cont, Elec, Heated, Manual Fold
- DNU = Equipment, Additional DVD Screen
- DPN = OSRVM w/ Elect, Heat, Turn
- DR4 = OSRVM, Electric, Heated, Light Sensitive, Power Folding, Turn Signal (Export?)
- DT4 = Factory Installed Cigar Lighter (Cadillac Only)
- E52 = One Piece Lift Gate With Lift Glass
- E61 = Door RR Liftgate, Power
- EVA = Evap Emission
- EXPORT = European Export Content (awaiting RPO)
- G69 = Level Control Auto, Air, HD
- HVY = Heavy Duty Models (20HD, 30, 31)
- (-HVY) = Light Duty Models (10, 20LD)
- JD3 = Brake System, Vacuum, ABS Controls, 7,700 Lbs
- JF3 = Brake System, Vacuum, ABS Controls, 7,000 Lbs
- JF4 = Pedals Adjustable, Power
- JF7 = Brake System, Vacuum, ABS Controls, 6,400 Lbs
- JH6 = Brake Hyd Power, 4 Whl Disc, 9,900 Lbs
- JH7 = Brake Hyd Power, 4 Whl Disc, 12,300 Lbs
- JL1 = Integrated Trailer Brake Controller
- JL0 = Active Brake Control (VSES) Not Desired
- JL4 = Control Active Brake (VSES)
- K18 = Reactor System Air Injection, Electric
- K34 = Cruise Control, Electric
- K65 = Generators 105 Amp, Dual,
- KA6 = Heater Seat, Rear
- KA9 = Heater Steering Wheel
- KB6 = Heater Seat, Cooling, Frt
- L76 = 6.0L V8 Gasoline Engine (Aluminum - DOD)
- L92 = 6.0L V8 Gasoline Engine (Aluminum - DOD)
- LC9 = 5.3L V8 E85 Engine (Aluminum - DOD)
- LH6 = 5.3L V8 Gasoline Engine (Aluminum - DOD)
- LMG = 5.3L V8 Gasoline Engine (Iron - DOD) E85
- LMM = Engine Diesel 8 cyl, 6.6L, DPI, V8, Duramax
- LU3 = 4.3L V6 Gasoline Engine (Iron)
- LY2 = 4.8L V8 Gasoline Engine (Iron)
- LY5 = 5.3L V8 Gasoline Engine (Iron - DOD)
- LY6 = 6.0L V8 Gasoline Engine (Iron)
- M30 = Transmission Auto 4 Speed, HMD, 4L60E, Electronic
- M70 = Transmission Auto 4 Spd, HMD, 4L70-E, Super Duty
- M96 = Transmission Manual 5 Speed, Tremec, 190 mm

ARE16300  
003  
GMT900  
GM Proprietary

Thursday, June 29, 2006  
3:01:45 pm  
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Preface: Support Information

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2008  
GMT900

System Status: Object Status: X

## Preface: Support Information (cont'd)

### •RPOs (continued)

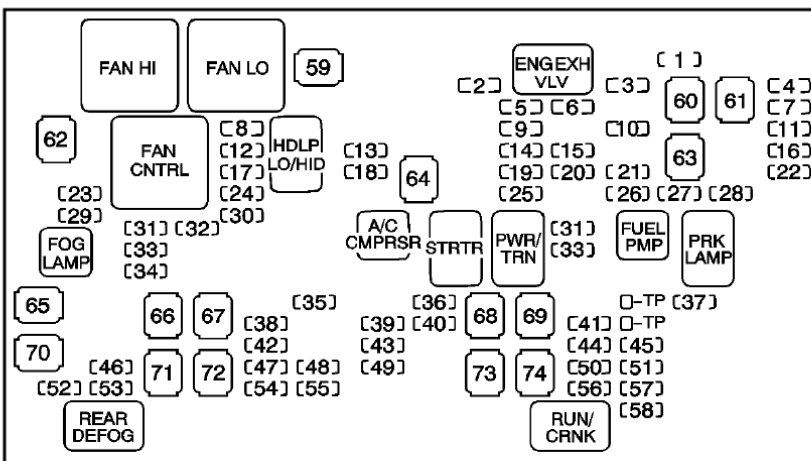
- MW7 = Transmission Auto 5 Speed, Allison LCT, O/D, Conv Clutch
- MYC = Transmission Auto 6 Speed, HMD, 6L80
- MYD = Transmission Auto 6 Speed, HMD, 6L90
- NP8 = Transfer Case Active, 2 Speed, Push Button Cont.
- (-NQZ) = Dual Fuel Tanks (NQZ = 18 Gal Fuel Tank Delete)
- NQF = Transfer Case Electric Shift Cont, Two Speed, Alum
- NQG = Transfer Case Manual Shift Cont, Two Speed, Alum
- NQH = Transfer Case Active, Two Speed, Push Button Control, Alum
- PPV = Police Package (2WD)
- (PPV contains 6J1, 6J3, 6J4, 6J7, 7X6, 7X7, 9G8, JL0, TRW, WX7, & optionally 6A6)
- PTO = Provisions Power Take Off Controls
- R05 = Dual Rear Wheels
- SERIES10 = 10 Series (Pickup/Utility/UUV)
- SERIES20 = 20 Series (Pickup/Utility/UUV)
- SERIES30 = 30 Series (Pickup)
- SERIES31 = 31 Series (Cab Chassis)
- SPLSVRLS = Low Speed GMLAN Splice Saver
- T61 = Daytime Running Lamps
- T79 = Lamp Fog, Rr
- T96 = Lamp Fog, Frt
- TP2 = Auxiliary Battery
- TQ5 = Control Intelligent High Beam
- TR2 = Lamp Side Repeater (Export)
- TRW = Provisions - Roof Mount Emergency Lamp
- TZ0 = Transmission Manual 5 Speed, Tremec, 85 mm
- U01 = Lamp Five, Roof Marker, Truck
- U2K = Digital Audio System S-Band (SDARS)
- U3R = Radio AM/FM Stereo, WX, Seek/Scan, CD, DVD, Nav, Clock, DSP, RDS, w/Voice Rec Micro (Cadillac)
- U3U = Radio AM/FM Stereo, Seek/Scan, DVD, CD, Clock ETR, Navigation, Voice Rec, MP3 (Chevy/GMC)
- U42 = Entertainment System Rear Seat (DVD)
- U84 = Antenna Body Side Window, Radio
- UA6 = Theft Deterrent System (Export)
- UD7 = Sensor Indicator Rear Parking Assist (Ultrasonic)
- UE1 = OnStar Remote
- UG1 = Opener Garage Door, Universal
- UJ6 = Indicator Low Tire Press
- UK3 = Electronic System Steering Wheel Accessory Controls
- UK6 = Radio Control Rear Seat & Earphone Jacks (Only Available with UQA/UQS)
- UL5 = Radio Delete
- UQ3 = Uplevel Speaker Package
- UQ5 = Base Speaker Package
- UQA-Y91 = Premium Non-Luxury Speaker System (6-Channel Bose)
- UQA&Y91 = Premium Luxury Speaker System (9-Channel Bose)
- UQS = Premium Luxury Speaker System (9-Channel Bose with Surround)
- UVB = Radio AM/FM Stereo, Seek/Scan, Auto Tone, CD, CD-R MP3, DVD, Nav, Clock, ETR, RDS (Chevy/GMC Non-Luxury)
- UVC = Camera Rear View
- UY2 = Wiring Provisions Camper & 5th Wheel Trailer
- UY7 = Wiring Harness Truck Trailer, HD

### •RPOs (continued)

- VYU = Provisions Snow Plow
- WX7 = Speaker Wiring Provision
- X88 = Chevrolet
- XA7 = Washer Nozzles, Heated, Windshield (WFHS)
- Y91 = Luxury Trim (Includes YE9)
- YE9 = Uplevel Trim
- (-YE9) = Base Trim
- YF2 = Sales Package Ambulance Upfitter (Generators, Lighting)
- Z49 = Export Canadian Modif Mandatory Base Equipment
- Z55 = Chassis Package Bi-State Real Time Damping
- Z75 = Cadillac
- Z82 = Trailer Provisions Special Equipment, H.D.
- Z88 = GMC

## Power Distribution: Pickup - Fuse Block Underhood, View - Label

### GAS ESSENCE



#### MINI FUSES MINI-FUSIBLES

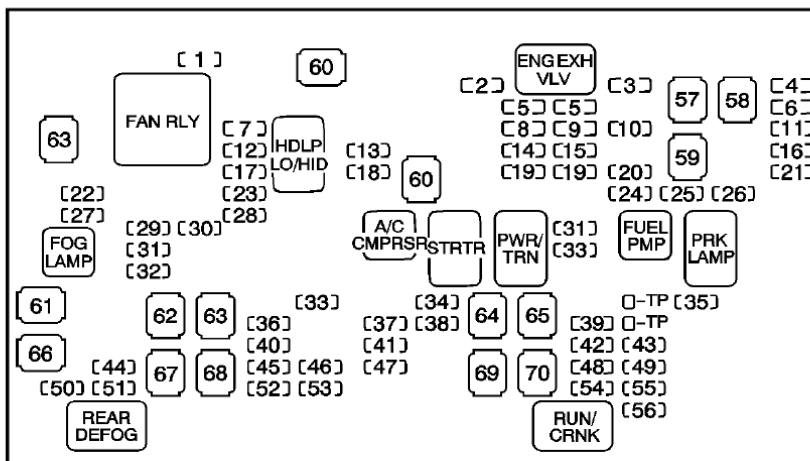
- |                          |                       |
|--------------------------|-----------------------|
| 1 - TRLR STOP RT (10A)   | 21 - FUEL PUMP (20A)  |
| 2 - EXH VLV (30A)        | 22 - FSCM (20A)       |
| 3 - ESC/ALC EXH (30A)    | 23 - HDLP WASH (20A)  |
| 4 - TRLR STOP LT (10A)   | 24 - REAR WASH (15A)  |
| 5 - ENG (15A)            | 25 - INJ-A (20A)      |
| 6 - ECM/THROT CONT (15A) | 26 - TRLR PRK (15A)   |
| 7 - ITBC (15A)           | 27 - LT PRK (15A)     |
| 8 - FRT WASH (15A)       | 28 - RT PRK (15A)     |
| 9 - 02-B SNRSR (10A)     | 29 - FOG LAMP (15A)   |
| 10 - ABS 2 (25A)         | 30 - HORN (15A)       |
| 11 - TRLR BCK/UP (10A)   | 31 - HI HDLP-RT (10A) |
| 12 - LO HDLP-LT (20A)    | 32 - DRL (15A)        |
| 13 - ECM-BATT (10A)      | 33 - HI HDLP-LT (10A) |
| 14 - INJ-B (20A)         | 34 - DRL 2 (15A)      |
| 15 - TCM-BATT (15A)      | 35 - S/ROOF (30A)     |
| 16 - VEH BCK/UP (10A)    | 36 - DLIS (2A)        |
| 17 - LO HDLP-RT (20A)    | 37 - FRT WPR (25A)    |
| 18 - A/C CMPSR (10A)     | 38 - SEO B2 (30A)     |
| 19 - 02-A SNRSR (10A)    | 39 - EAP (15A)        |
| 20 - TRANS IGN 1 (15A)   | 40 - HVAC BATT (10A)  |
|                          | 41 - AIRBAG IGN (10A) |

#### J-CASE FUSES FUSIBLES JCASE

- |                         |                           |
|-------------------------|---------------------------|
| 42 - AMP (30A)          | 59 - FAN-1 (40A)          |
| 43 - RDO (15A)          | 60 - ALC/COMP (40A)       |
| 44 - MISC IGN (10A)     | 61 - HEAVY DUTY ABS (60A) |
| 45 - L/GATE RELSE (15A) | 62 - FAN-2 (40A)          |
| 46 - AIRBAG BATT (15A)  | 63 - ABS-1 (40A)          |
| 47 - INFOTMNT (15A)     | 64 - STRTR (40A)          |
| 48 - IPC (10A)          | 65 - STUD-2 (30A)         |
| 49 - EXP/PTO (15A)      | 66 - LBEC1 (60A)          |
| 50 - AUX HVAC-IGN (10A) | 67 - ELEC RUN BOARD (30A) |
| 51 - CHMSL (15A)        | 68 - WSW/HTR (60A)        |
| 52 - REAR DEFOG (30A)   | 69 - TREC (30A)           |
| 53 - HTD MIR (15A)      | 70 - STUD-1 (40A)         |
| 54 - SEO B1 (15A)       | 71 - MBEC1 (60A)          |
| 55 - LTR (20A)          | 72 - HVAC BLWR (40A)      |
| 56 - SEO/ALC (10A)      | 73 - LGM (30A)            |
| 57 - HVAC-IGN (10A)     | 74 - LBEC2 (60A)          |
| 58 - ECM-IGN (15A)      |                           |

TP 

### DIESEL



#### MINI FUSES MINI-FUSIBLES

- |                           |                       |
|---------------------------|-----------------------|
| 1 - FAN (10A)             | 20 - FUEL PUMP (20A)  |
| 2 - EXH VLV (30A)         | 21 - ITBC (15A)       |
| 3 - ESC/ALC EXH (30A)     | 22 - HDLP WASH (20A)  |
| 4 - TRLR STOP LT (10A)    | 23 - REAR WASH (15A)  |
| 5 - ENG (15A)             | 24 - TRLR PRK (15A)   |
| 6 - TRLR STOP RT (10A)    | 25 - LT PRK (15A)     |
| 7 - FRT WASH (15A)        | 26 - RT PRK (15A)     |
| 8 - FUEL HTR (15A)        | 27 - FOG LAMP (15A)   |
| 9 - TCM-BATT (15A)        | 28 - HORN (15A)       |
| 10 - ABS 2 (25A)          | 29 - HI HDLP-RT (10A) |
| 11 - TRLR BCK/UP (10A)    | 30 - DRL (15A)        |
| 12 - LO HDLP-LT (20A)     | 31 - HI HDLP-LT (10A) |
| 13 - ECM-BATT (10A)       | 32 - DRL 2 (15A)      |
| 14 - DSL ECM (25A)        | 33 - S/ROOF (30A)     |
| 15 - TRNS IGN 1 (15A)     | 34 - DLIS (2A)        |
| 16 - VEH BCK/UP (10A)     | 35 - WPR (25A)        |
| 17 - LO HDLP-RT (20A)     | 36 - SEO B2 (30A)     |
| 18 - A/C CMPSR (10A)      | 37 - EAP (15A)        |
| 19 - ECM/THROT CONT (15A) | 38 - HVAC BATT (10A)  |
|                           | 39 - AIRBAG IGN (10A) |

#### J-CASE FUSES FUSIBLES JCASE

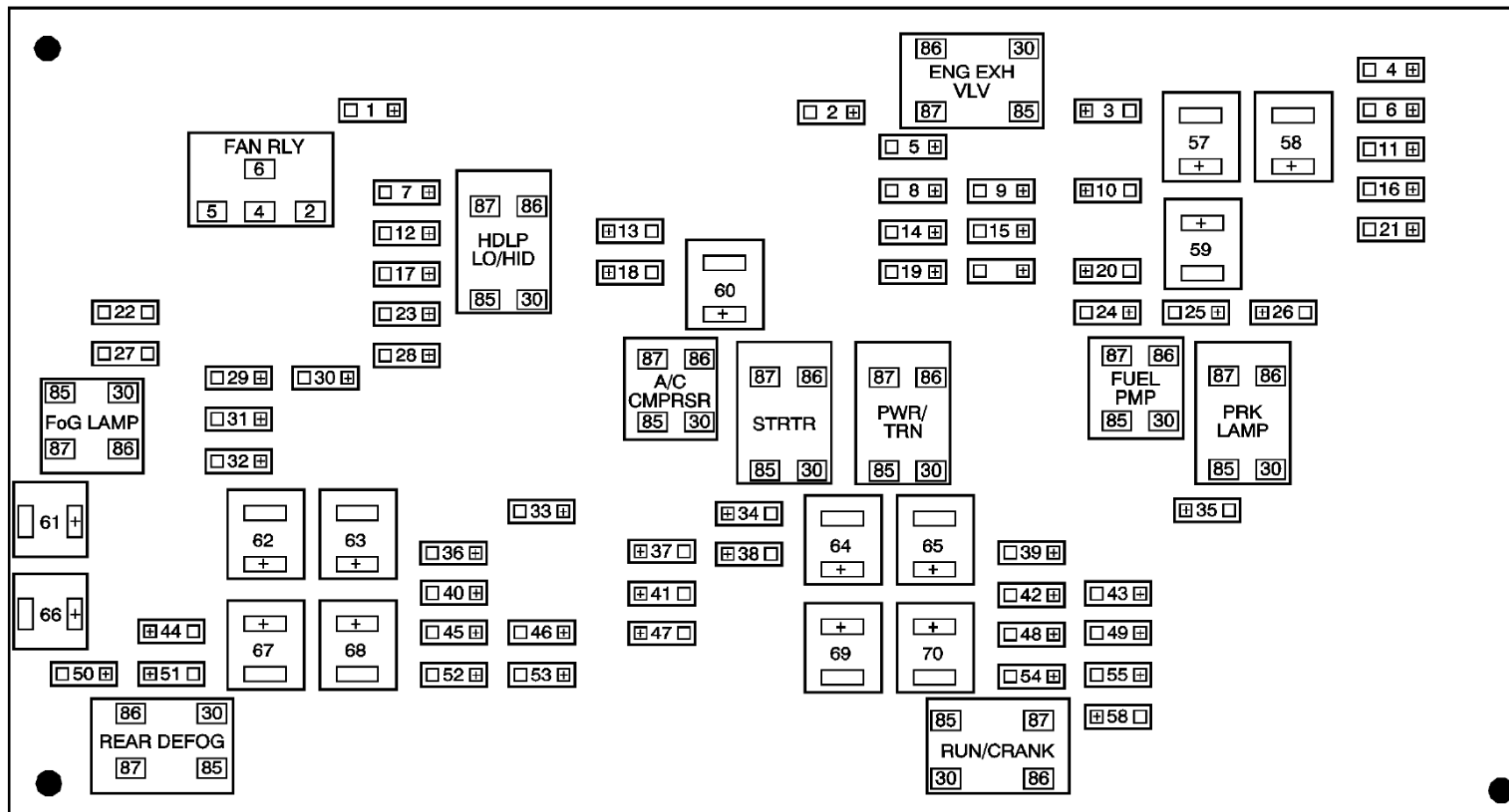
- |                         |                           |
|-------------------------|---------------------------|
| 40 - AMP (30A)          | 57 - ALC/COMP (40A)       |
| 41 - RDO (15A)          | 58 - HEAVY DUTY ABS (60A) |
| 42 - MISC IGN (10A)     | 59 - ABS-1 (40A)          |
| 43 - L/GATE RELSE (15A) | 60 - STRTR (40A)          |
| 44 - AIRBAG BATT (15A)  | 61 - STUD-2 (30A)         |
| 45 - INFOTMNT (15A)     | 62 - LBEC1 (60A)          |
| 46 - IPC (10A)          | 63 - ELEC RUN BOARD (30A) |
| 47 - EXP/PTO (15A)      | 64 - WSW/HTR (60A)        |
| 48 - AUX HVAC-IGN (10A) | 65 - TREC (30A)           |
| 49 - CHMSL (15A)        | 66 - STUD-1 (40A)         |
| 50 - REAR DEFOG (30A)   | 67 - MBEC1 (60A)          |
| 51 - HTD MIR (15A)      | 68 - HVAC BLWR (40A)      |
| 52 - SEO B1 (15A)       | 69 - LGM (30A)            |
| 53 - LTR (20A)          | 70 - LBEC2 (60A)          |
| 54 - SEO/ALC (10A)      |                           |
| 55 - HVAC-IGN (10A)     |                           |
| 56 - ECM-IGN (15A)      |                           |

TP 

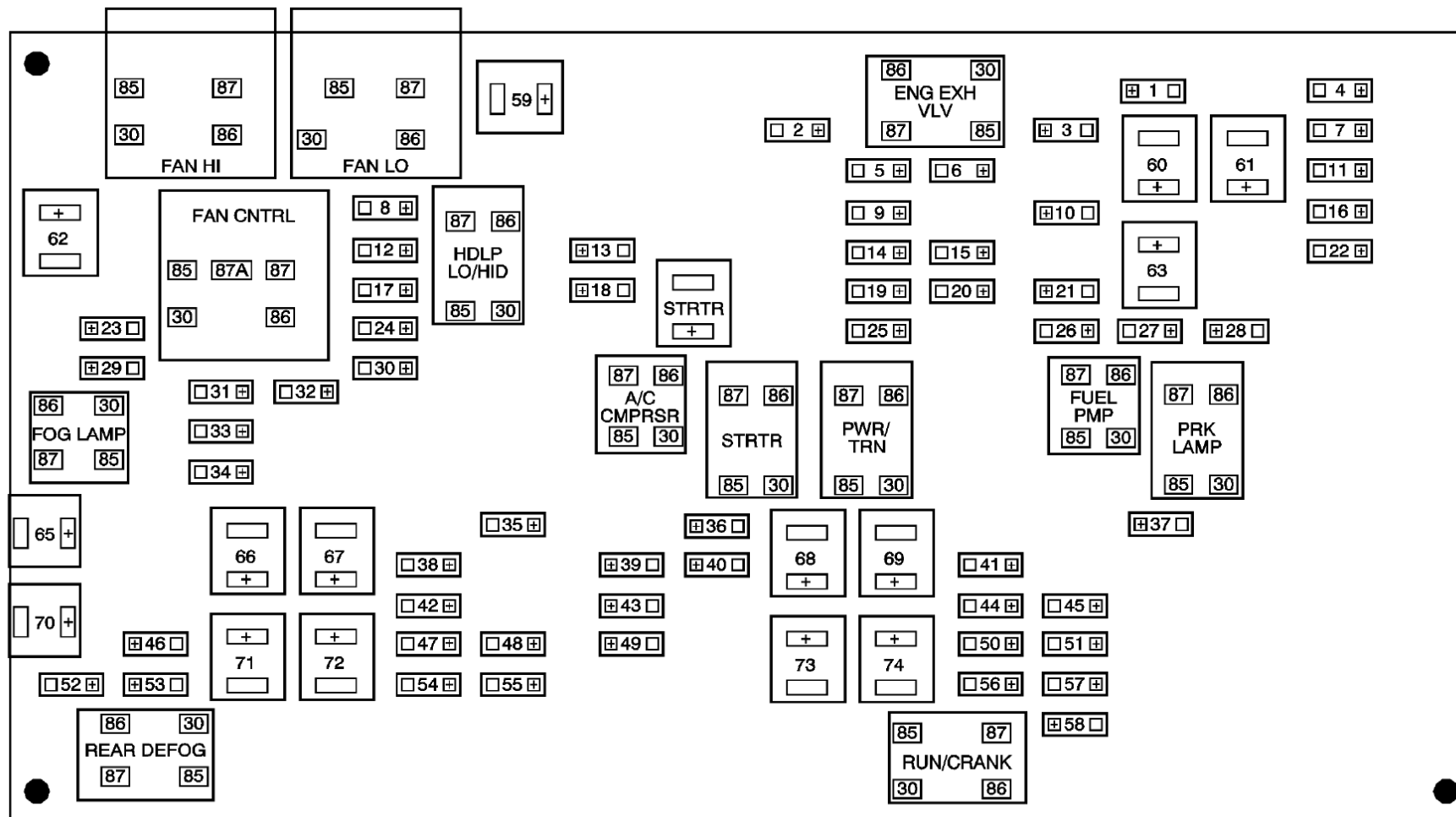
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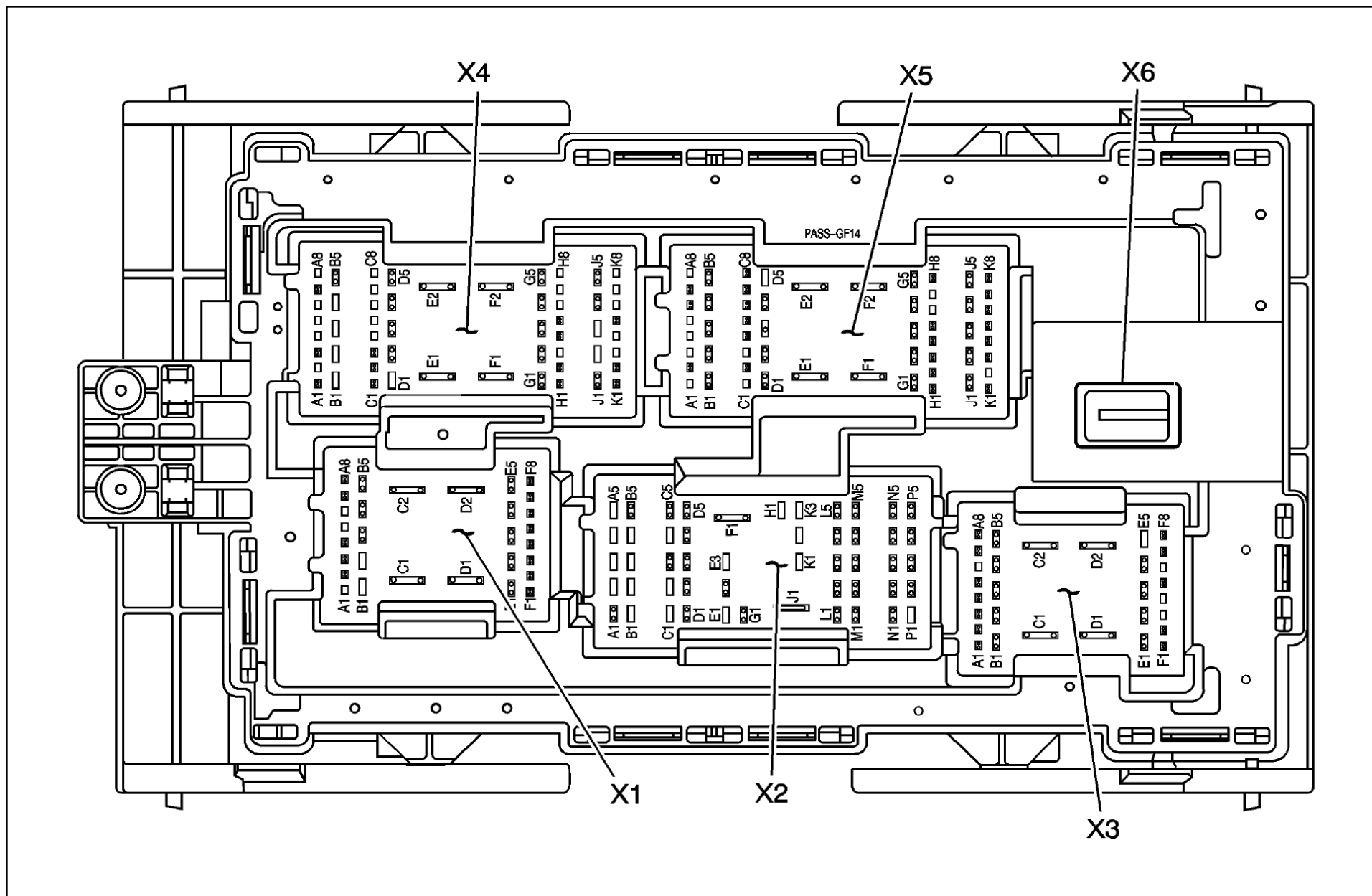
## Power Distribution: Pickup – Fuse Block – Underhood, Top View – Diesel



## Power Distribution: Pickup – Fuse Block – Underhood, Top View – Gas



## Power Distribution: Pickup - Fuse Block - Underhood, Bottom View



## Power Distribution: Pickup – Underhood, Device Usage – Diesel (cont'd)

| Fuse Block – Underhood, Device Usage – Diesel |                     |        |                                                                  |
|-----------------------------------------------|---------------------|--------|------------------------------------------------------------------|
| No.                                           | Device              | Rating | Description                                                      |
| 1                                             | FAN Fuse            | 10A    | Fan Relay                                                        |
| 2                                             | EXH VLV Fuse        | 30A    | Not Used                                                         |
| 3                                             | ESC/ALC EXH Fuse    | 30A    | Not Used                                                         |
| 4                                             | TRLR STOP LT        | 10A    | Trailer Wiring, Auxiliary Body Control                           |
| 5                                             | ENG Fuse            | 15A    | Mass Air Flow (MAF)/Intake Air Temperature (IAT) Sensor          |
| 6                                             | TRLR STOP RT Fuse   | 10A    | Trailer Wiring, Auxiliary Body Control Module (XBCM) (Expert)    |
| 7                                             | FRT WASH Fuse       | 15A    | Windshield Washer Fluid Pump                                     |
| 8                                             | Fuel HTR Fuse       | 15A    | Glow Plug Control Module (GPCM), Fuel Heater                     |
| 9                                             | TCM-BATT Fuse       | 15A    | Transmission Control Module (TCM)                                |
| 10                                            | ABS 2 Fuse          | 25A    | Electronic Brake Control Module (EBCM)                           |
| 11                                            | TRLR BCK/UP Fuse    | 10A    | Trailer Wiring                                                   |
| 12                                            | LO HDLP-LT Fuse     | 20A    | Headlamp-Low Beam-Left                                           |
| 13                                            | ECM-BATT Fuse       | 10A    | Engine Control Module (ECM)                                      |
| 14                                            | DSL ECM Fuse        | 25A    | Engine Control Module (ECM)                                      |
| 15                                            | TRANS IGN 1 Fuse    | 15A    | Transmission Control Module (TCM), Front Axle Actuator (NQF/NQG) |
| 16                                            | VEH BCK/UP Fuse     | 10A    | Backup Lamp-Left, Backup Lamp-Right                              |
| 17                                            | LO HDLP-RT Fuse     | 20A    | Headlamp-Low Beam-Right                                          |
| 18                                            | A/C CMPRSR Fuse     | 10A    | A/C Compressor Clutch                                            |
| 19                                            | ECM/THROT CONT Fuse | 15A    | Engine Control Module (ECM)                                      |
| 20                                            | FUEL PUMP Fuse      | 20A    | Fuel Pump and Sender Assembly-Primary                            |
| 21                                            | ITBC Fuse           | 15A    | Integrated Trailer Brake Controller (ITBC) Module (JL1)          |
| 22                                            | HDLP WASH Fuse      | 20A    | Not Used                                                         |

| Fuse Block – Underhood, Device Usage – Diesel |                     |        |                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------|---------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                           | Device              | Rating | Description                                                                                                                                                                                                                                                                                                                                            |
| 23                                            | REAR WASH Fuse      | 15A    | Not Used                                                                                                                                                                                                                                                                                                                                               |
| 24                                            | TRLR PRK Fuse       | 15A    | Trailer Wiring                                                                                                                                                                                                                                                                                                                                         |
| 25                                            | LT PRK Fuse         | 15A    | License Lamp-Left, Marker Lamp-LF (Z88), Park/Turn Signal Lamp-LF Upper, Park/Turn Signal Lamp-LF Lower, marker Lamp-LR (Z88), Tail/Stop and Turn Signal Lamp-Lower Left, Tail/Stop and Turn Signal Lamp-Upper Left, Clearance Lamp-LF (R05), Clearance Lamp-LR (R05), Clearance Lamp (U01), Roof Marker Lamp-Left (U01), Roof Marker Lamp-Right (U01) |
| 26                                            | RT PRK Fuse         | 15A    | Marker Lamp-RF (Z88), Park/Turn Signal Lamp-RF Upper, Park/Turn Signal Lamp-RF Lower, Tail/Stop and Turn Signal Lamp-Lower Right, Tail/Stop and Turn Signal Lamp-Lower Right, Marker Lamp-RR (Z88), License Lamp-Right Clearance lamp-RR (R05), Marker Lamp-Tailgate                                                                                   |
| 27                                            | FOG LAMP Fuse       | 15A    | Fog Lamp-LF (T96), Fog Lamp-LF (T96)                                                                                                                                                                                                                                                                                                                   |
| 28                                            | HORN Fuse           | 15A    | Horn, left, Horn-Right (7Z1)                                                                                                                                                                                                                                                                                                                           |
| 29                                            | HI HEADLAMP-RT Fuse | 10A    | Headlamp-High Beam-Right                                                                                                                                                                                                                                                                                                                               |
| 30                                            | DRL Fuse            | 15A    | DRL 2 Fuse                                                                                                                                                                                                                                                                                                                                             |
| 31                                            | HI HEADLAMP-LT Fuse | 10A    | Headlamp-High Beam-Right                                                                                                                                                                                                                                                                                                                               |
| 32                                            | DRL 2 Fuse          | 15A    | LO HDLP-LT Fuse, LO HDLP-RT Fuse                                                                                                                                                                                                                                                                                                                       |
| 33                                            | S/ROOF Fuse         | 30A    | Sunroof Module (CF5), Roof Beacon Relay (TRW)                                                                                                                                                                                                                                                                                                          |
| 34                                            | DLIS Fuse           | 2A     | Ignition Switch, Theft Deterrent Module (TDM)                                                                                                                                                                                                                                                                                                          |
| 35                                            | WPR Fuse            | 25A    | Wiper 1 PCB Relay                                                                                                                                                                                                                                                                                                                                      |
| 36                                            | SEO B2 Fuse         | 30A    | Emergency Vehicle Roof Lamp Relay (5Y0)                                                                                                                                                                                                                                                                                                                |

## Power Distribution: Pickup – Underhood, Device Usage – Diesel (cont'd)

| Fuse Block – Underhood, Device Usage – Diesel |                   |        |                                                                                                                                                                            |
|-----------------------------------------------|-------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                           | Device            | Rating | Description                                                                                                                                                                |
| 37                                            | EAP Fuse          | 15A    | PARK ENABLE Relay, ELECTRONIC ADJUSTABLE PEDALS Relay, I/P Multi-function Accessory Switch                                                                                 |
| 38                                            | HVAC BATT Fuse    | 10A    | HVAC Control Module                                                                                                                                                        |
| 39                                            | AIRBAG IGN Fuse   | 10A    | Inflatable Restraint Sensing and Diagnostic Module (SDM), Inflatable Restraint Passenger Air Bag ON/OFF Indicator, Inflatable Restraint I/P Module Disable Switch (C99)    |
| 40                                            | AMP Fuse          | 30A    | Audio Amplifier (UQA)                                                                                                                                                      |
| 41                                            | RDO Fuse          | 15A    | Digital Radio Receiver (U2K), Radio, Rear Seat Audio (RSA) Controller (UK6)                                                                                                |
| 42                                            | MISC IGN Fuse     | 10A    | Auxiliary Body Control Module (XBCM) (Export), Stop Lamp Switch, Transfer Case Shift Control Module (NQF/NQH), Integrated Trailer Brake Controller (ITBC) Module (JL1)     |
| 43                                            | L/GATE RELSE Fuse | 15A    | Not Used                                                                                                                                                                   |
| 44                                            | AIRBAG BATT Fuse  | 15A    | Inflatable Restraint Passenger Presence System (PPS) Module, Inflatable Restraint Sensing and Diagnostic Module (SDM), Inflatable Restraint Vehicle Roll-over Sensor (ASF) |
| 45                                            | INFOTMNT Fuse     | 15A    | Video Display (U42), Rear Video Display (DNU), Vehicle Communication Interface Module (VCIM) (UE1)                                                                         |
| 46                                            | IPC Fuse          | 10A    | Body Control Module (BCM), Instrument Panel Cluster (IPC)                                                                                                                  |
| 47                                            | EXP/PTO Fuse      | 15A    | Auxiliary Body Control Module (XBCM) (Export)/Power Take Off Relay (PTO)                                                                                                   |
| 48                                            | AUX HVAC-IGN Fuse | 10A    | Instrument Panel Cluster (IPC), Inside Rearview Mirror (ISRV), Heated Steering Wheel Module (KA9)                                                                          |
| 49                                            | CHMSL Fuse        | 15A    | Cargo Lamp/Center High Mounted Stop Lamp (CHMSL)                                                                                                                           |

| Fuse Block – Underhood, Device Usage – Diesel |                     |        |                                                                                                                                                            |
|-----------------------------------------------|---------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                           | Device              | Rating | Description                                                                                                                                                |
| 50                                            | REAR DEFOG Fuse     | 30A    | Defogger Grid                                                                                                                                              |
| 51                                            | HTD MIR Fuse        | 15A    | Outside Rearview Mirror-Driver (-AN3), Outside Rearview Mirror-Passenger (-AN3)                                                                            |
| 52                                            | SEO B1 Fuse         | 15A    | Auxiliary Body Control Module (XBCM) (Export), Power Take Off (PTO) Module                                                                                 |
| 53                                            | LTR Fuse            | 20A    | Auxiliary Power Outlet-Front 1, Data Link Connector (DLC)                                                                                                  |
| 54                                            | SEO/ALC Fuse        | 10A    | Not Used                                                                                                                                                   |
| 55                                            | HVAC-IGN Fuse       | 10A    | Air Temperature Actuator-Left (CJ2), Air Temperature Actuator-Right (CJ2), Air Temperature Actuator (C67), Mode Actuator, Recirculation Actuator (CJ2/C67) |
| 56                                            | ECM-IGN Fuse        | 15A    | Engine Control Module (ECM), Fuel Pump Relay-Secondary (LY6-NQZ), Fuel System Control Module (FSCM)                                                        |
| 57                                            | ALC/COMP Fuse       | 40A    | Not Used                                                                                                                                                   |
| 58                                            | HEAVY DUTY ABS Fuse | 60A    | Electronic Brake Control Module (EBCM)                                                                                                                     |
| 60                                            | STRTR Fuse          | 40A    | Starter                                                                                                                                                    |
| 61                                            | STUD-2 Fuse         | 30A    | Blunt Cut Wire, Integrated Trailer Brake Controller Solid State Relay (JL1)                                                                                |
| 62                                            | LBECI Fuse          | 60A    | AUX PWR 2 Fuse, REAR WPR Fuse, PDM Fuse, AUX PWR Fuse                                                                                                      |
| 63                                            | ELEC RUN BOARD Fuse | 30A    | Not Used                                                                                                                                                   |
| 64                                            | WSW/HTR Fuse        | 60A    | Windshield Washer Solvent Heater (XA7)                                                                                                                     |
| 65                                            | TREC Fuse           | 30A    | Transfer Case Shift Control Module (NQF/NQH)                                                                                                               |
| 66                                            | Stud-1 Fuse         | 40A    | Trailer Wiring                                                                                                                                             |
| 67                                            | MBEC1 Fuse          | 60A    | DRIVER SEAT 2 Circuit Breaker, PASSENGER SEAT 1 Circuit Breaker                                                                                            |

## Power Distribution: Pickup – Underhood, Device Usage – Diesel (cont'd)

| Fuse Block – Underhood, Device Usage – Diesel                                                                   |                       |        |                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------|-----------------------|--------|------------------------------------------------------------------------------------------------------------|
| No.                                                                                                             | Device                | Rating | Description                                                                                                |
| 68                                                                                                              | HVAC BLWR Fuse        | 40A    | Blower Motor Control Module                                                                                |
| 69                                                                                                              | LGM Fuse              | 30A    | Not Used                                                                                                   |
| 70                                                                                                              | LBEC2 Fuse            | 60A    | BCM Fuse, COOLED SEATS Fuse, DDM Fuse, DIM Fuse, DSM Fuse, REAR HVAC Fuse, RT STOP TRN Fuse, WSW PUMP Fuse |
| --                                                                                                              | A/C COMPRSR Relay     | --     | A/C CMPRSR Fuse                                                                                            |
| --                                                                                                              | ENG EXH VLV Relay     | --     | AXH VLV Fuse                                                                                               |
| --                                                                                                              | FAN RLY Relay         | --     | Cooling Fan                                                                                                |
| --                                                                                                              | FOG LAMP Relay        | --     | FOG LAMP Fuse                                                                                              |
| --                                                                                                              | FUEL PUMP Relay       | --     | FUEL PUMP Fuse                                                                                             |
| --                                                                                                              | HDLP LO/HID Relay     | --     | LO HDLP-LT Fuse, LO HDLP-RT Fuse, DRL 2 Fuse                                                               |
| --                                                                                                              | PARK LAMP Relay       | --     | LT PRK Fuse, PRK Fuse, TRLR PRK Fuse                                                                       |
| --                                                                                                              | PWR/TRN Relay         | --     | DSL ECM Fuse, ECM/THROT Fuse, ENG Fuse, Fan Fuse, FUEL HTR Fuse                                            |
| --                                                                                                              | REAR DEFOG Relay      | --     | REAR DEFOG Fuse                                                                                            |
| --                                                                                                              | RUN/CRNK Relay        | --     | AIRBAG Fuse, AUX HVAC-IGN Fuse, IGN Fuse, ECM-IGN Fuse, MISC IGN Fuse, SEO/ALC Fuse, TRANS IGN 1 Fuse      |
| --                                                                                                              | STRTR Relay           | --     | STRTR Fuse                                                                                                 |
| Note: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block. |                       |        |                                                                                                            |
| --                                                                                                              | BCK/UP LAMP PCB Relay | --     | VEH BCK/UP Fuse, TRLR BCK/UP Fuse                                                                          |
| --                                                                                                              | DRL PCB Relay         | --     | DRL Fuse                                                                                                   |
| --                                                                                                              | FRT WASH PCB Relay    | --     | FRT WASH Fuse                                                                                              |

| Fuse Block – Underhood, Device Usage – Diesel |                         |        |                                                              |
|-----------------------------------------------|-------------------------|--------|--------------------------------------------------------------|
| No.                                           | Device                  | Rating | Description                                                  |
| --                                            | HI BEAM PCB Relay       | --     | HI HEADLAMP-LT Fuse, HI HEADLAMP-RT Fuse                     |
| --                                            | HORN PCB Relay          | --     | HORN Fuse                                                    |
| --                                            | L/GATE PCB Relay        | --     | L/GATE RELSE Fuse                                            |
| --                                            | LOCK PCB Relay          | --     | LCK 2 Fuse (YE9)                                             |
| --                                            | LOCK/UNLOCK PCB Relay   | --     | LCK 1 Fuse, LCK 2 Fuse, UNLCK 1 Fuse, UNLCK 2 Fuse (AU3-YE9) |
| --                                            | REAR WASH PCB Relay     | --     | REAR WASH Fuse                                               |
| --                                            | TRLR STOP LT PCB Relay  | --     | TRLR STOP LT Fuse                                            |
| --                                            | TRLR STOP RT PCB Relay  | --     | TRLR STOP RT Fuse                                            |
| --                                            | UNLOCK PCB Relay        | --     | DRV UNLCK Fuse, UNLCK 1 Fuse, UNLCK 2 Fuse                   |
| --                                            | WIPER CONTROL PCB Relay | --     | Windshield Wiper Motor                                       |
| --                                            | WIPER SPEED PCB Relay   | --     | Windshield Wiper Motor                                       |

## Power Distribution: Pickup – Underhood, Device Usage – Gas

| Fuse Block – Underhood, Device Usage – Gas |                     |        |                                                                                                                                                                                                                                                    |
|--------------------------------------------|---------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                        | Device              | Rating | Description                                                                                                                                                                                                                                        |
| 1                                          | TRLR STOP RT Fuse   | 10A    | Trailer Wiring, Auxiliary Body Control Module (XBCM) (Export)                                                                                                                                                                                      |
| 2                                          | EXH VLV Fuse        | 30A    | Not Used                                                                                                                                                                                                                                           |
| 3                                          | ESC/ALC EXH Fuse    | 30A    | Not Used                                                                                                                                                                                                                                           |
| 4                                          | TRLR STOP LT Fuse   | 10A    | Trailer Wiring, Auxiliary Body Control Module (XBCM) (Export)                                                                                                                                                                                      |
| 5                                          | ENG Fuse            | 15A    | Central Sequential Fuel Injection (Central SFI) (4.3L), Evaporative Emissions (EVAP) Canister Purge Solenoid Valve (4.8L, 5.3L, 6.0L and 6.2L), Mass Air Flow (MAF)/Intake Air Temperature (IAT) Sensor, Valve Lifter Oil Manifold (VLOM) Assembly |
| 6                                          | ECM/THROT CONT Fuse | 15A    | Engine Control Module (ECM)                                                                                                                                                                                                                        |
| 7                                          | ITBC Fuse           | 15A    | Integrated Trailer Brake Controller (ITBC) Module (JL1)                                                                                                                                                                                            |
| 8                                          | FRT WASH Fuse       | 15A    | Windshield Washer Fluid Pump                                                                                                                                                                                                                       |
| 9                                          | 02-B SNSR Fuse      | 10A    | Heated Oxygen Sensor (H02S) Bank 1 Sensor2, Heated Oxygen Sensor (H02S) Bank 2 Sensor 2                                                                                                                                                            |
| 10                                         | ABS 2 Fuse          | 25A    | Electronic Brake Control Module (EBCM)                                                                                                                                                                                                             |
| 11                                         | TRLR BCK/UP Fuse    | 10A    | Trailer Wiring                                                                                                                                                                                                                                     |
| 12                                         | LO HDLP-LT Fuse     | 20A    | Headlamp-Low Beam-Left                                                                                                                                                                                                                             |
| 13                                         | ECM-BATT Fuse       | 10A    | Engine Control Module (ECM)                                                                                                                                                                                                                        |
| 14                                         | INJ-B Fuse          | 20A    | Fuel Injector2, Fuel Injector 4, Fuel Injector 6, Fuel Injector 8, Injector Coil 2, Ignition Coil 4, Ignition Coil 6, Ignition Coil 8                                                                                                              |
| 15                                         | TCM-BATT Fuse       | 15A    | Transmission Control Module (TCM)                                                                                                                                                                                                                  |
| 16                                         | DSL ECM Fuse        | 25A    | Engine Control Module (ECM)                                                                                                                                                                                                                        |
| 17                                         | TRANS IGN 1 Fuse    | 15A    | Transmission Control Module (TCM), Front Axle Actuator (NQF/NQG)                                                                                                                                                                                   |

| Fuse Block – Underhood, Device Usage – Gas |                  |        |                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                        | Device           | Rating | Description                                                                                                                                                                                                                                                                                                                                             |
| 18                                         | VEH BACK/UP Fuse | 10A    | Backup Lamp-Left, Backup Lamp-Right                                                                                                                                                                                                                                                                                                                     |
| 19                                         | LO HDLP-RT Fuse  | 20A    | Headlamp-Low Beam-Right                                                                                                                                                                                                                                                                                                                                 |
| 20                                         | A/C CMPSR Fuse   | 10A    | A/C Compressor Clutch                                                                                                                                                                                                                                                                                                                                   |
| 21                                         | 02-A SNSR Fuse   | 10A    | Heated Oxygen Sensor (H02S) Bank 1 Sensor 1, Heated Oxygen Sensor (H02S) Bank 2 Sensor 1                                                                                                                                                                                                                                                                |
| 22                                         | TRANS IGN 1 Fuse | 15A    | Transmission Control Module (TCM), 1-2 Shift Solenoid (1-2 SS) Valve, 2-3 Shift Solenoid (2-3 SS) Valve, 3-2 Shift Solenoid (3-2 SS) Valve (M30/M70), Torque Converter Clutch (TCC) Solenoid Valve (M30/M70), Torque Converter Clutch Pulse Width Modulation (TCC PWM) Solenoid Valve                                                                   |
| 23                                         | FUEL PUMP Fuse   | 20A    | Fuel Pump and Sender Assembly-Primary (-FSCM)                                                                                                                                                                                                                                                                                                           |
| 24                                         | FSCM Fuse        | 20A    | Fuel System Control Module (FSCM)                                                                                                                                                                                                                                                                                                                       |
| 25                                         | HDLP WASH Fuse   | 20A    | Not Used                                                                                                                                                                                                                                                                                                                                                |
| 26                                         | REAR WASH Fuse   | 15A    | Not Used                                                                                                                                                                                                                                                                                                                                                |
| 27                                         | INJ-A Fuse       | 20A    | Fuel Injector 1, Fuel Injector 3, Fuel Injector 5, Fuel Injector 7, Ignition Coil 1, Ignition Coil 3, Ignition Coil 5, Ignition Coil 7                                                                                                                                                                                                                  |
| 28                                         | TRLR PRK Fuse    | 15A    | Trailer Wiring                                                                                                                                                                                                                                                                                                                                          |
| 29                                         | LT PRK Fuse      | 15A    | License Lamp-Left, Marker Lamp-LF (Z-88), Park/Turn Signal Lamp-LF Upper, Park/Turn Signal Lamp-LF Lower, Marker Lamp-LR (Z88), Tail/Stop and Turn Signal Lamp-Lower Left, Tail/Stop and Turn Signal Lamp-Upper Left, Clearance Lamp-LF (R05), Clearance Lamp-LR (R05), Clearance Lamp (U01), Roof Marker Lamp-Left (U01), Roof Marker Lamp-Right (U01) |

## Power Distribution: Pickup – Underhood, Device Usage – Gas (cont'd)

| Fuse Block – Underhood, Device Usage – Gas |                     |        |                                                                                                                                                                                                                                                                                             |
|--------------------------------------------|---------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                        | Device              | Rating | Description                                                                                                                                                                                                                                                                                 |
| 30                                         | RT PRK Fuse         | 15A    | Marker Lamp-RF (Z88), Park/Turn Signal Lamp-RF Upper Park/Turn Signal Lamp-RF Lower Tail/Stop and Turn Signal Lamp-Lower Right, Tail/Stop and Turn Signal Lamp-Lower Right, Marker Lamp-RR (Z88), License Lamp-Right Clearance Lamp-RF (R05), Clearance Lamp-RR (R05), Marker Lamp-Tailgate |
| 31                                         | FOG LAMP Fuse       | 15A    | Fog Lamp-LF (T-96), Fog Lamp- LF (T96)                                                                                                                                                                                                                                                      |
| 32                                         | HORN Fuse           | 15A    | Horn-Left, Horn-Right (7Z1)                                                                                                                                                                                                                                                                 |
| 33                                         | HI HEADLAMP-RT Fuse | 10A    | Headlamp-High Beam-Right                                                                                                                                                                                                                                                                    |
| 34                                         | DRL Fuse            | 15A    | DRL 2 Fuse                                                                                                                                                                                                                                                                                  |
| 35                                         | HI HEADLAMP-LT Fuse | 10A    | Headlamp-High Beam-Right                                                                                                                                                                                                                                                                    |
| 36                                         | DRL 2 Fuse          | 15A    | LO HDLP-LT Fuse, LO HDLP-RT Fuse                                                                                                                                                                                                                                                            |
| 37                                         | S/ROOF Fuse         | 30A    | Sunroof Module (CF5), Roof Beacon Relay (TRW)                                                                                                                                                                                                                                               |
| 38                                         | DLIS Fuse           | 2A     | Ignition Switch, Theft Deterrent Module (TDM)                                                                                                                                                                                                                                               |
| 39                                         | FRT WPR Fuse        | 25A    | Wiper 1 PCV Relay                                                                                                                                                                                                                                                                           |
| 40                                         | SEO B2 Fuse         | 30A    | Emergency Vehicle Roof Lamp Relay (5Y0)                                                                                                                                                                                                                                                     |
| 41                                         | EAP Fuse            | 15A    | PARK ENABLE Relay, ELECTRONIC ADJUSTABLE PEDALS Relay, I/P Multifunction Accessory Switch                                                                                                                                                                                                   |
| 42                                         | HVAC BATT Fuse      | 10A    | HVAC Control Module                                                                                                                                                                                                                                                                         |
| 43                                         | AIRBAG IGN Fuse     | 10A    | Inflatable Restraint Sensing and Diagnostic Module (SDM), Inflatable Restraint Passenger Air Bag ON/OFF Indicator, Inflatable Restraint I/P Module Disable Switch (C99)                                                                                                                     |
| 44                                         | AMP Fuse            | 30A    | Audio Amplifier (UQA)                                                                                                                                                                                                                                                                       |

| Fuse Block – Underhood, Device Usage – Gas |                   |        |                                                                                                                                                                            |
|--------------------------------------------|-------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                        | Device            | Rating | Description                                                                                                                                                                |
| 45                                         | RDO Fuse          | 15A    | Digital Radio Receiver (U2K), Radio, Rear Seat Audio (RSA) Controller (UK6)                                                                                                |
| 46                                         | MISC IGN Fuse     | 10A    | Auxiliary Body Control Module (XBCM) (Export), Stop Lamp Switch, Transfer Case Shift Control Module (NQF/NQH), Integrated Trailer Brake Controller (ITBC) Module (JL1)     |
| 47                                         | L/GATE RELSE Fuse | 15A    | Not Used                                                                                                                                                                   |
| 48                                         | AIRBAG BATT Fuse  | 15A    | Inflatable Restraint Passenger Presence System (PPS) Module, Inflatable Restraint Sensing and Diagnostic Module (SDM), Inflatable Restraint Vehicle Roll-over Sensor (ASF) |
| 49                                         | INFOTMNT Fuse     | 15A    | Video Display (U42), Rear Video Display (DNU), Vehicle Communication Interface Module (VCIM) (UE1)                                                                         |
| 50                                         | IPC Fuse          | 15A    | Auxiliary Body Control Module (XBCM) (Export) Power Take off Relay (PTO)                                                                                                   |
| 51                                         | EXP/PTO Fuse      | 20A    | Fuel System Control Module (FSCM)                                                                                                                                          |
| 52                                         | AUX HVAC-IGN Fuse | 10A    | Instrument Panel Cluster (IPC), Inside Rearview Mirror (ISRM), Heated Steering Wheel Module (KA9)                                                                          |
| 53                                         | CHMSL Fuse        | 15A    | Cargo Lamp/Center High Mounted Stop Lamp (CHMSL)                                                                                                                           |
| 54                                         | REAR DEFOG Fuse   | 30A    | Defogger Grid                                                                                                                                                              |
| 55                                         | HTD MIR Fuse      | 15A    | Outside Rearview Mirror-Driver (-AN3), Outside Rearview Mirror-Passenger (-AN3)                                                                                            |
| 56                                         | SEO B1 Fuse       | 15A    | Auxiliary Body Control Module (XBCM) (Export), Power Take Off-(PTO) Module                                                                                                 |
| 57                                         | LTR Fuse          | 20A    | Auxiliary Power Outlet-Front 1, DataLink Connector (DLC)                                                                                                                   |
| 58                                         | SEO/ALC Fuse      | 10A    | Not Used                                                                                                                                                                   |

## Power Distribution: Pickup – Underhood, Device Usage – Gas (cont'd)

| Fuse Block – Underhood, Device Usage – Gas |                     |        |                                                                                                                                                            |
|--------------------------------------------|---------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                        | Device              | Rating | Description                                                                                                                                                |
| 59                                         | HAVAC-IGN Fuse      | 10A    | Air Temperature Actuator-Left (CJ2), Air Temperature Actuator-Right (CJ2), Air Temperature Actuator (C67), Mode Actuator, Recirculation Actuator (CJ2/C67) |
| 60                                         | ECM-IGN Fuse        | 15A    | Engine Control Module (ECM), Fuel Pump Relay-Secondary (LY6-NQZ), Fuel System Control Module (FSCM)                                                        |
| 61                                         | FAN-1 Fuse          | 40A    | FAN LO Relay                                                                                                                                               |
| 62                                         | ALC/COMP Fuse       | 40A    | Not Used                                                                                                                                                   |
| 63                                         | HEAVY DUTY ABS Fuse | 60A    | Electronic Brake Control Module (EBCM)                                                                                                                     |
| 64                                         | FAN-2 Fuse          | 40A    | FAN HI Relay                                                                                                                                               |
| 65                                         | ABS-1 Fuse          | 40A    | Electronic Brake Control Module (EBCM)                                                                                                                     |
| 66                                         | STRTR Fuse          | 40A    | Starter                                                                                                                                                    |
| 67                                         | STUD-1 Fuse         | 30A    | Blunt Cut Wire, Integrated Trailer Brake Controller Solid State Relay (JL1)                                                                                |
| 68                                         | LBEC1 Fuse          | 60A    | AUX PWR 2 Fuse, REAR WPR Fuse, PDM Fuse, AUX PWR Fuse                                                                                                      |
| 69                                         | ELEC RUN BOARD Fuse | 30A    | Not Used                                                                                                                                                   |
| 70                                         | WSW/HTR Fuse        | 60A    | Windshield Washer Solvent Heater (XA7)                                                                                                                     |
| 71                                         | TREC Fuse           | 30A    | Transfer Case Shift Control Module (NOF/NQH)                                                                                                               |
| 72                                         | STUD-1 Fuse         | 40A    | Trailer Wiring                                                                                                                                             |
| 73                                         | MBEC1 Fuse          | 60A    | DRIVER SEAT 2 Circuit Breaker, PASSENGER SEAT 1 Circuit Breaker, PWR REAR WNDW Circuit Breaker                                                             |
| 74                                         | HVAC BLWR Fuse      | 40A    | Blower Motor Control Module                                                                                                                                |
| 75                                         | LGM Fuse            | 30A    | Not Used                                                                                                                                                   |

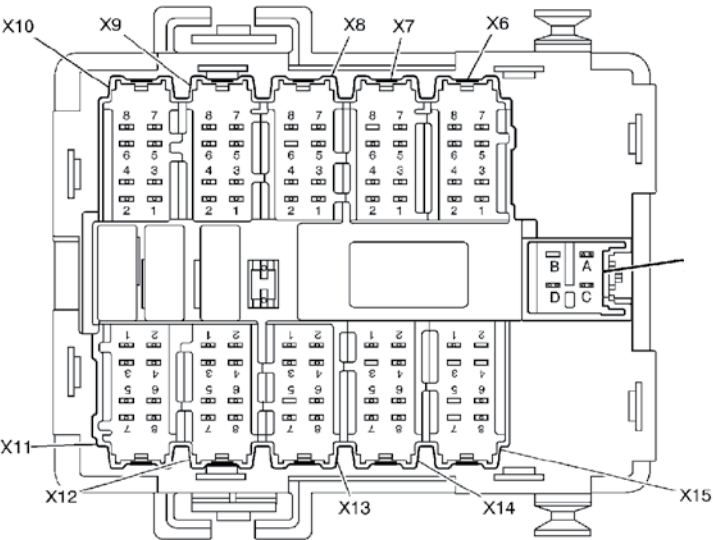
| Fuse Block – Underhood, Device Usage – Gas |                   |        |                                                                                                                                                |
|--------------------------------------------|-------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------|
| No.                                        | Device            | Rating | Description                                                                                                                                    |
| 76                                         | LBEC2 Fuse        | 60A    | BCM Fuse, COOLED SEATS Fuses, DDM Fuse, DIM Fuse, DSM Fuse, REAR HVAC Fuse, RT STOP TRN Fuse, WSW PUMP Fuse                                    |
| --                                         | A/C COMPRSR Relay | --     | A/C COMPRSR Fuse                                                                                                                               |
| --                                         | ENG EXH VLV Relay | --     | AXH VLV Fuse                                                                                                                                   |
| --                                         | FAN CONTROL Relay | --     | Cooling Fan Control                                                                                                                            |
| --                                         | FAN HI Relay      | --     | Cooling Fan-Right                                                                                                                              |
| --                                         | FAN LO Relay      | --     | Cooling Fan-Left                                                                                                                               |
| --                                         | FOG LAMP Relay    | --     | FOG LAMP Fuse                                                                                                                                  |
| --                                         | FUEL PMP Relay    | --     | FUEL PUMP Fuse                                                                                                                                 |
| --                                         | HDLP LO/HID Relay | --     | LO HDLP-LT Fuse, LO HDLP-RT Fuse, DRL 2 Fuse                                                                                                   |
| --                                         | PRK LAMP Relay    | --     | LT PRK Fuse, RT PRK Fuse, TRLR PRK Fuse                                                                                                        |
| --                                         | PWR/TRN Relay     | --     | ECM/THROT CONT Fuse, ENG Fuse, INJ-A Fuse, INJ-B Fuse, 01-A SNSR Fuse, 02-B SNSR Fuse, FAN CNTRL PCB Relay, FAN HI PCB Relay, FAN LO PCB Relay |
| --                                         | REAR DEFOG Relay  | --     | REAR DEFOG Fuse                                                                                                                                |
| --                                         | RUN/CRNK Relay    | --     | AIRBAG Fuse, AUX HVAC-IGN Fuse, IGN Fuse, ECM-IGN Fuse, MISC IGN Fuse, SEO/ALC Fuse, TRANS IGN 1 Fuse                                          |
| --                                         | STRTR Relay       | --     | Starter Fuse                                                                                                                                   |

## Power Distribution: Pickup – Underhood, Device Usage – Gas (cont'd)

| Fuse Block – Underhood, Device Usage – Gas                                                                      |                         |        |                                                              |
|-----------------------------------------------------------------------------------------------------------------|-------------------------|--------|--------------------------------------------------------------|
| Note: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block. |                         |        |                                                              |
| No.                                                                                                             | Device                  | Rating | Description                                                  |
| --                                                                                                              | BCK/UP LAMP PCB Relay   | --     | VEH BCK/UP Fuse, TRLR BCK/UP Fuse                            |
| --                                                                                                              | DRL PCB Relay           | --     | DRL Fuse                                                     |
| --                                                                                                              | FRT WASH PCB Relay      | --     | FRT WASH Fuse                                                |
| --                                                                                                              | HI BEAM PCB Relay       | --     | HI HEADLAMP-LT Fuse, HI HEADLAMP-RT Fuse                     |
| --                                                                                                              | HORN PCB Relay          | --     | HORN Fuse                                                    |
| --                                                                                                              | L/GATE PCB Relay        | --     | L/GATE RELSE Fuse                                            |
| --                                                                                                              | LOCK PCB Relay          | --     | LCK 2 Fuse (YE9)                                             |
| --                                                                                                              | LOCK/UNLOCK PCB Relay   | --     | LCK 1 Fuse, LCK 2 Fuse, UNLCK 1 Fuse, UNLCK 2 Fuse (AU3-YE9) |
| --                                                                                                              | REAR WASH PCB Relay     | --     | REAR WASH Fuse                                               |
| --                                                                                                              | TRLR STOP LT PCB Relay  | --     | TRLR STOP LT Fuse                                            |
| --                                                                                                              | TRLR STOP RT PCB Relay  | --     | TRLR STOP RT Fuse                                            |
| --                                                                                                              | UNLOCK PCB Relay        | --     | DRV UNLCK Fuse, UNLCK 1 Fuse, UNLCK 2 Fuse                   |
| --                                                                                                              | WIPER CONTROL PCB Relay | --     | Windshield Wiper Motor                                       |
| --                                                                                                              | WIPER SPEED PCB Relay   | --     | Windshield Wiper Motor                                       |

Power Distribution: Pickup – Junction Block-Left I/P – Location

Junction Block-Left I/P, Top View

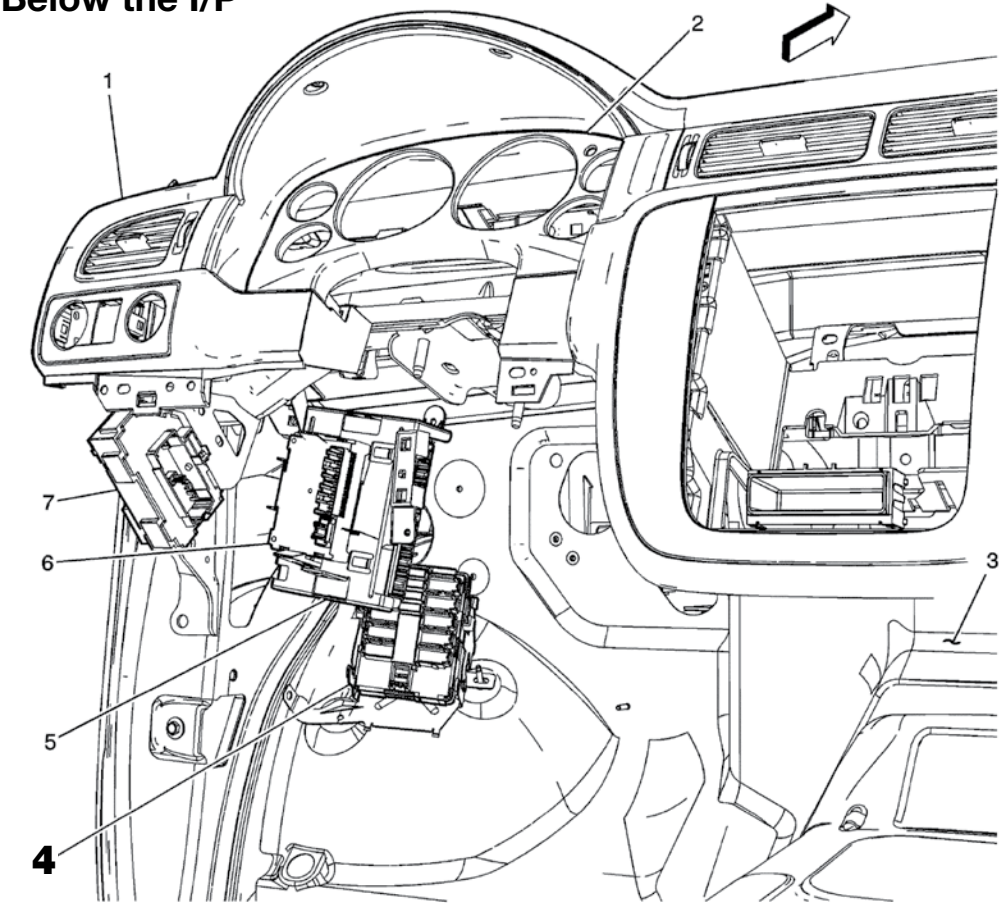


Circuit Breakers

- CB1 = RT DOORS ..... (25A)
- CB2 = PASS SEAT 1 ..... (25A)
- CB3 = DRIVER SEAT 2 ..... (25A)
- CB4 = PWR REAR WNDW ..... (25A)

| Junction Block - Left I/P, Device Usage |        |                                                                        |
|-----------------------------------------|--------|------------------------------------------------------------------------|
| Device                                  | Rating | Description                                                            |
| DRIVER SEAT 2 Circuit Breaker           | 25A    | Memory Seat Module (AN3), Seat Adjuster Switch-Driver (AG1 Except AN3) |
| PASS SEAT 1 Circuit Breaker             | 25A    | Seat Adjuster Switch-Passenger, Seat Lumbar Switch-Passenger (AN3)     |
| PWR REAR WDW Circuit Breaker            | 25A    | Not Used                                                               |
| RT DOORS Circuit Breaker                | 25A    | Passenger Door Module (PDM), Window Switch-RR                          |

Below the I/P



- (1) I/P Trim
- (2) I/P Cluster Trim
- (3) Floor Panel
- (4) Junction Block - Left I/P**
- (5) Body Control Module (BCM)
- (6) Transfer Case Shift Control Module
- (7) Fuse Block - I/P

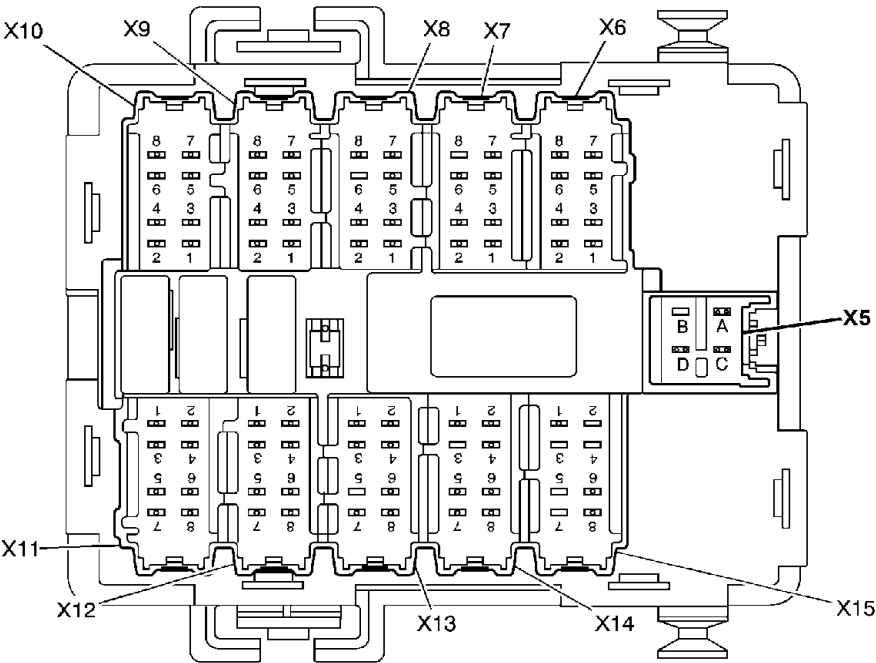
Power Distribution: Pickup – Junction Block-Left I/P – Top View

Circuit Breakers

- CB1 = RT DOORS . . . . . (25A)
- CB2 = PASS SEAT 1 . . . . . (25A)
- CB3 = DRIVER SEAT 2 . . . . . (25A)
- CB4 = PWR REAR WNDW . . . . . (25A)

| Junction Block - Left I/P, Device Usage |        |                                                                           |
|-----------------------------------------|--------|---------------------------------------------------------------------------|
| Device                                  | Rating | Description                                                               |
| DRIVER SEAT 2<br>Circuit Breaker        | 25A    | Memory Seat Module (AN3), Seat Adjuster<br>Switch-Driver (AG1 Except AN3) |
| PASS SEAT 1<br>Circuit Breaker          | 25A    | Seat Adjuster Switch-Passenger,<br>Seat Lumbar Switch-Passenger (AN3)     |
| PWR REAT WDW<br>Circuit Breaker         | 25A    | Not Used                                                                  |
| RT DOORS<br>Circuit Breaker             | 25A    | Passenger Door Module (PDM), Window<br>Switch-RR                          |

Junction Block-Left I/P, Top View



## Power Distribution: Pickup – Junction Block-Left I/P-X1

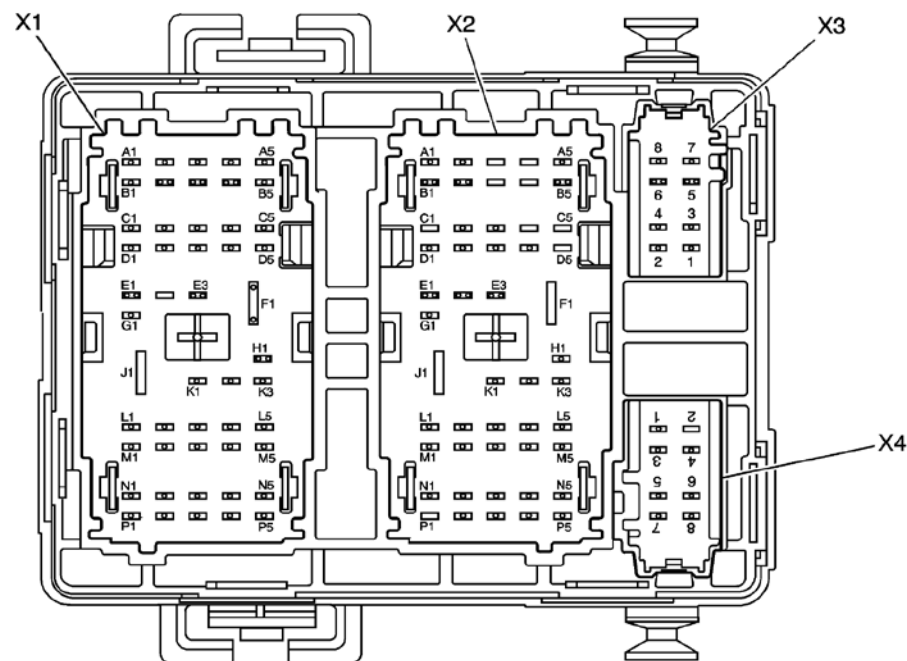
### Junction Block - Left I/P - X1 Connector Part Information

- OEM: 15467568
- Service: 19115661
- Description: 50-way F GT 280 Series (GY)

| Junction Block - Left I/P, X1 |            |             |                                              |
|-------------------------------|------------|-------------|----------------------------------------------|
| Pin                           | Wire Color | Circuit No. | Function                                     |
| A1                            | 0.5 RD/WH  | 4440        | Battery Positive Voltage                     |
| A2                            | --         | --          | Not Used                                     |
| A3                            | 0.35 PK    | 239         | Ignition 1 Voltage                           |
|                               | 0.35 PK    | 239         | Ignition 1 Voltage (NQF/NQH)                 |
| A4                            | 0.35 PK    | 239         | Ignition 1 Voltage                           |
|                               | 0.8 PK     | 239         | Ignition 1 Voltage (PTO/EXPORT)              |
| A5                            | BK         | 2550        | Ground (U42/UK6)                             |
| B1-B2                         | --         | --          | Not Used                                     |
| B3                            | 1 BK       | 2550        | Ground                                       |
| B4                            | 0.5 GY     | 157         | Courtesy Lamp Control                        |
| B5                            | --         | --          | Not Used                                     |
| C1                            | 0.35 PK    | 1639        | Ignition 1 Voltage                           |
| C2                            | 0.5 BN/WH  | 230         | Instrument Panel Lamps Dimming Control       |
|                               | 0.35 BN/WH | 230         | Instrument Panel Lamps Dimming Control (AU3) |
| C3                            | 0.5 BK     | 2250        | Ground (U2K + Y91)                           |
|                               | 0.5 BK     | 2250        | Ground (UE1 + Y91)                           |
| C4                            | --         | --          | Not Used                                     |

(continued on Pg. B-19)

### Junction Block-Left I/P, Bottom View



### Junction X1-Terminal Parts Information

- **Pins: F1**
  - Terminal/Tray: 12110127/19
  - Core/Insulation Crimp: F/G
  - Release Tool/Test Probe: 12150860/J-35616-44 (YE)
- **Pins: D1, K2**
  - Terminal/Tray: 15304713/19
  - Core/Insulation Crimp: 4/4
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: A1, A3, A4, B4, C1, C2, D3, E1, E3, H1, K1, L1, L2, L3, L4, M1, M2, M3, M4, M5, N1, N2, N3, N5, P1, P2, P3, P5**
  - Terminal/Tray: 15304711/8
  - Core/Insulation Crimp: E/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: B3, E3, G1, K3**
  - Terminal/Tray: 15304711/8
  - Core/Insulation Crimp: 2/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)

## Power Distribution: Pickup – Junction Block-Left I/P-Connector X1 (cont'd)

**Junction Block - Left I/P - X1** (continued from Pg. B-18)

| Junction Block - Left I/P, X1 |            |             |                                                   |
|-------------------------------|------------|-------------|---------------------------------------------------|
| Pin                           | Wire Color | Circuit No. | Function                                          |
| C5                            | 0.5 YE/BK  | 5813        | Park Enable Supply Voltage (JF4 -AN3)             |
| D1                            | 2 RD/WH    | 1340        | Battery Positive Voltage (A31)                    |
| D2                            | --         | --          | Not Used                                          |
| D3                            | 0.35 BN/WH | 230         | Instrument Panel Lamps Dimming Control (AU3 -AN3) |
|                               | 0.5 BN/WH  | 230         | Instrument Panel Lamps Dimming Control (CF5)      |
| D4-D5                         | --         | --          | Not Used                                          |
| E1                            | 0.5 BK/WH  | 1851        | Ground (XA7)                                      |
| E2                            | --         | --          | Not Used                                          |
| E3                            | 0.8 BK/WH  | 1851        | Ground                                            |
|                               | 0.5 BK/WH  | 1851        | Ground (C42/C67/CJ2)                              |
| F1                            | 5 RD/BK    | 642         | Battery Positive Voltage                          |
| G1                            | 0.8 BK/WH  | 1851        | Ground                                            |
|                               | 0.8 BK/WH  | 1851        | Ground                                            |
| H1                            | 0.5 BK/WH  | 1851        | Ground                                            |
|                               | 0.5 BK/WH  | 1851        | Ground                                            |
| J1                            | --         | --          | Not Used                                          |
| K1                            | 0.5 BK/WH  | 1851        | Ground                                            |
|                               | 0.35 BK/WH | 1851        | Ground (C42/C67/CJ2)                              |
| K2                            | 2 BK/WH    | 1851        | Ground                                            |
| K3                            | 0.8 BK/WH  | 1851        | Ground                                            |
|                               | 0.8 BK/WH  | 1851        | Ground                                            |
| L1                            | 0.5 OG     | 6815        | Inadvertent Power Control                         |

| Junction Block - Left I/P, X1 |              |             |                                                      |
|-------------------------------|--------------|-------------|------------------------------------------------------|
| Pin                           | Wire Color   | Circuit No. | Function                                             |
| L2                            | 0.5 RD/WH    | 240         | Battery Positive Voltage (UG1 / 5X7 / 5Y0 / TRW)     |
| L3                            | 0.35 PU/WH   | 6816        | Indicator Dimming Control                            |
| L4                            | 0.35 WH/BK   | 5515        | Inside Air Temperature Sensor Assembly Control (CJ2) |
| L5                            | --           | --          | Not Used                                             |
| M1                            | 0.5 BN/WH    | 230         | Instrument Panel Lamps Dimming Control               |
|                               | 0.35 BN/WH   | 230         | Instrument Panel Lamps Dimming Control (NQF/NQH)     |
| M2                            | 0.35 PK      | 1691        | Low Reference (DF5 +DL3/DR4)                         |
| M3                            | 0.35 PU/WH   | 6816        | Indicator Dimming Control (UD7/XA7)                  |
| M4                            | 0.35 D-GN    | 734         | Inside Air Temperature Sensor Signal (CJ2)           |
| M5                            | 0.5 OG       | 1054        | Stop Lamp Supply Voltage (Domestic)                  |
|                               | 0.5 OG       | 1054        | Stop Lamp Supply Voltage (Domestic)                  |
|                               | 0.5 L-BN     | 1320        | Stop Lamp Supply Voltage (Export)                    |
| N1                            | 0.35 D-GN/WH | 636         | Ambient Air Temperature Sensor Signal (DF5)          |
| N2                            | 0.35 YE      | 61          | Low Reference (DF5)                                  |
| N3                            | 0.35 PU/WH   | 6816        | Indicator Dimming Control (PTO)                      |
| N4                            | --           | --          | Not Used                                             |
| N5                            | 0.35 PK      | 1139        | Ignition 1 Voltage                                   |
|                               | 0.35 PK      | 1139        | Ignition 1 Voltage (C99)                             |

(continued on Pg. B-20)

## ***Power Distribution: Pickup – Junction Block-Left I/P-Connector X1 (cont'd) & X2***

### **Junction Block - Left I/P - X1 (continued from Pg. B-19)**

| Junction Block - Left I/P, X1 |            |             |                                                  |
|-------------------------------|------------|-------------|--------------------------------------------------|
| Pin                           | Wire Color | Circuit No. | Function                                         |
| P1                            | 0.35 D-BU  | 38          | Backup Lamp Relay Control                        |
|                               | 0.35 D-BU  | 38          | Backup Lamp Relay Control (DF5)                  |
| P2                            | 0.35 GY    | 1690        | Automatic Day/Night Mirror Signal (DF5 +DL3/DR4) |
| P3                            | 0.35 PU/WH | 6816        | Indicator Dimming Control (NQF/NQH)              |
| P4                            | --         | --          | Not Used                                         |
| P5                            | 0.35 D-GN  | 6101        | Low Reference                                    |

### **Junction Block - Left I/P - X2 Connector Part Information**

- OEM: 15467567
- Service: 19149284
- Description: 50-way F GT 280 Series (BK)

#### **Terminal Part Information**

- **Pins: A1, A2, B5, C1, C3, E1, E2, E3, G1, H1, K2, K3, L3, L4, L5, M3, M5, N1, N3, N4, N5, P1, P3, P5**
- Terminal/Tray: 15304711/8
- Core/Insulation Crimp: E/A
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: A5, D3**
- Terminal/Tray: 15304711/8
- Core/Insulation Crimp: 2/A
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: B1, P4**
- Terminal/Tray: 15304713/19
- Core/Insulation Crimp: F/D
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: D1**
- Terminal/Tray: 15304713/19
- Core/Insulation Crimp: 4/4
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| Junction Block - Left I/P, X2 |            |             |                                                |
|-------------------------------|------------|-------------|------------------------------------------------|
| Pin                           | Wire Color | Circuit No. | Function                                       |
| A1                            | 0.35 PK    | 739         | Ignition 1 Voltage                             |
| A2                            | 0.35 YE    | 43          | Accessory Voltage                              |
|                               | 0.35 YE    | 43          | Accessory Voltage                              |
| A3-A4                         | --         | --          | Not Used                                       |
| A5                            | 0.8 RD/WH  | 1040        | Battery Positive Voltage (D07-Y91)             |
| B1                            | 0.5 RD/WH  | 242         | Battery Positive Voltage (5Y0)                 |
| B3-B4                         | --         | --          | Not Used                                       |
| B5                            | 0.5 RD/WH  | 3240        | Battery Positive Voltage (-Y91 +UE1 +U42)      |
| C1                            | 0.5 YE/BK  | 5813        | Park Enable Supply Voltage (JF4)               |
| C2                            | 3 BK       | 2550        | Ground (Y91)                                   |
| C3                            | 0.5 RD/BK  | 340         | Battery Positive Voltage                       |
| C4-C5                         | --         | --          | Not Used                                       |
| D1                            | 2 BK       | 1050        | Ground (JF4 -AN3)                              |
| D2                            | --         | --          | Not Used                                       |
| D3                            | 0.8 RD/BK  | 4540        | Battery Positive Voltage                       |
|                               | 0.8 RD/BK  | 4540        | Battery Positive Voltage (PTO/EXPORT)          |
| D4-D5                         | --         | --          | Not Used                                       |
| E1                            | 0.5 OG/BK  | 5285        | Adjustable Pedals Relay Rearward Control (JF4) |
| E2                            | 0.5 RD/WH  | 740         | Battery Positive Voltage (JF4)                 |
| E3                            | 0.35 YE    | 6812        | Out of Park Signal (JF4 -AN3)                  |
| G1                            | 0.5 PU     | 5286        | Adjustable Pedals Relay Forward Control (JF4)  |

*(continued on Pg. B-21)*

## ***Power Distribution: Pickup – Junction Block-Left I/P-Connector X2 (cont'd) & X3***

### **Junction Block - Left I/P - X2 (continued from Pg. B-20)**

| Junction Block - Left I/P, X2 |              |             |                                             |
|-------------------------------|--------------|-------------|---------------------------------------------|
| Pin                           | Wire Color   | Circuit No. | Function                                    |
| H1                            | 0.35 D-GN/WH | 817         | Vehicle Speed Signal                        |
|                               | 0.5 D-GN/WH  | 817         | Vehicle Speed Signal (Y91)                  |
| K1                            | --           | --          | Not Used                                    |
| K2                            | 0.35 YE      | 6817        | LED Backlight Dimming Control               |
| K3                            | 0.35 D-GN    | 5060        | Low Speed GMLAN Serial Data                 |
| L1-L2                         | --           | --          | Not Used                                    |
| L3                            | 0.35 YE      | 6817        | LED Backlight Dimming Control (UK3)         |
| L4                            | 0.35 YE      | 6817        | LED Backlight Dimming Control               |
| L5                            | 0.5 TN/BK    | 2500        | High Speed GMLAN Serial Data Bus+           |
|                               | 0.5 TN/BK    | 2500        | High Speed GMLAN Serial Data Bus+           |
| M1-M2                         | --           | --          | Not Used                                    |
| M3                            | 0.35 YE      | 6817        | LED Backlight Dimming Control               |
|                               | 0.35 YE      | 6817        | LED Backlight Dimming Control (C67/C42)     |
| M4                            | --           | --          | Not Used                                    |
| M5                            | 0.5 TN       | 2501        | High Speed GMLAN Serial Data Bus-           |
|                               | 0.5 TN       | 2501        | High Speed GMLAN Serial Data Bus-           |
| N1                            | 0.35 D-BU    | 2307        | Passenger Air Bag On Indicator Control      |
| N2                            | --           | --          | Not Used                                    |
| N3                            | 0.35 YE      | 6817        | LED Backlight Dimming Control (JL1)         |
|                               | 0.35 YE      | 6817        | LED Backlight Dimming Control (PTO)         |
| N4                            | 0.35 YE      | 6817        | LED Backlight Dimming Control               |
|                               | 0.35 YE      | 6817        | LED Backlight Dimming Control (K34/KA9/UK3) |

### **Junction Block - Left I/P, X2**

| Pin | Wire Color | Circuit No. | Function                                |
|-----|------------|-------------|-----------------------------------------|
| N5  | 0.35 TN    | 2501        | High Speed GMLAN Serial Data Bus-       |
| N5  | 0.35 TN    | 2501        | High Speed GMLAN Serial Data Bus-       |
| P1  | 0.35 PU    | 5234        | Passenger Seat Belt Indicator           |
| P2  | --         | --          | Not Used                                |
| P3  | 0.35 D-GN  | 2308        | Passenger Air Bag Off Indicator Control |
| P4  | 3 RD/WH    | 3740        | Battery Positive Voltage (UQA-Y91)      |
| P5  | 0.5 TN/BK  | 2500        | High Speed GMLAN Serial Data Bus+       |

### **Junction Block - Left I/P - X3 Connector Part Information**

- OEM: 13516840
- Service: 19149295
- Description: 8-way F GT 280 Series (GN)

#### **Terminal Part Information**

- Terminal/Tray: 13525970/4
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- Core/Insulation Crimp: E/A

### **Junction Block - Left I/P, X3**

| Pin | Wire Color | Circuit No. | Function                            |
|-----|------------|-------------|-------------------------------------|
| 1   | 0.5 TN/BK  | 2500        | High Speed GMLAN Serial Data Bus+   |
| 2   | 0.8 BK     | 1050        | Ground (D07 +YE9 +AN3)              |
| 3   | 0.5 TN     | 2501        | High Speed GMLAN Serial Data Bus-   |
| 4   | --         | --          | Not Used                            |
| 5   | 0.5 TN     | 2501        | High Speed GMLAN Serial Data Bus-   |
| 6   | 3 RD/WH    | 3740        | Battery Positive Voltage (UQA -Y91) |
| 7   | 0.5 TN/BK  | 2500        | High Speed GMLAN Serial Data Bus+   |
| 8   | --         | --          | Not Used                            |

## ***Power Distribution: Pickup – Junction Block-Left I/P-Connector X4 & X5 (SPO Alarm)***

### **Junction Block - Left I/P - X4 Connector Part Information**

- OEM: 13516829
- Service: 19115667
- Description: 8-way F GT 280 Series (OG)

#### **Terminal Part Information**

- **Pins: 4**
  - Terminal/Tray: 13525969/4
  - Core/Insulation Crimp: F/D
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: 3, 8**
  - Terminal/Tray: 13525970/4
  - Core/Insulation Crimp: 2/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: 1, 2, 5, 6, 7**
  - Terminal/Tray: 13525970/4
  - Core/Insulation Crimp: E/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| <b>Junction Block - Left I/P, X4</b> |                   |                    |                                    |
|--------------------------------------|-------------------|--------------------|------------------------------------|
| <b>Pin</b>                           | <b>Wire Color</b> | <b>Circuit No.</b> | <b>Function</b>                    |
| 1                                    | 0.35 D-GN         | 5600               | Low Speed GMLAN Serial Data (-Y91) |
| 2                                    | 0.5 RD/WH         | 340                | Battery Positive Voltage (-Y91)    |
|                                      | 0.5 RD/WH         | 340                | Battery Positive Voltage (UK6)     |
| 3                                    | 0.8 D-GN/WH       | 817                | Vehicle Speed Signal               |
| 4                                    | 3 BK              | 2550               | Ground (-Y91)                      |
| 5                                    | 0.5 BK            | 2550               | Ground (UE1-Y91)                   |
|                                      | 0.5 BK            | 2550               | Ground (U2K-Y91)                   |
| 6                                    | 0.5 RD/WH         | 3240               | Battery Positive Voltage (UE1)     |
|                                      | 0.5 RD/WH         | 3240               | Battery Positive Voltage (U42)     |
| 7                                    | 0.5 BK            | 2550               | Ground (U42/Y91)                   |
|                                      | 0.5 BK            | 2550               | Ground (U42/UK6-Y91)               |
| 8                                    | 0.8 RD/WH         | 1040               | Battery Positive Voltage (D07-Y91) |

### **Junction Block - Left I/P - X5 SPO Alarm Connector Part Information**

- OEM: 12194033
- Service: See Catalog
- Description: 4-way F Metri-Pack 280 Series (CM)

#### **Terminal Part Information**

- Terminal/Tray: See Terminal Repair Kit
- Core/Insulation Crimp: See Terminal Repair Kit
- Release Tool/Test Probe: See Terminal Repair Kit

| <b>Junction Block - Left I/P, X5 SPO Alarm</b> |                   |                    |                          |
|------------------------------------------------|-------------------|--------------------|--------------------------|
| <b>Pin</b>                                     | <b>Wire Color</b> | <b>Circuit No.</b> | <b>Function</b>          |
| A-C                                            | --                | --                 | Not Used                 |
| D                                              | 0.5 RD/WH         | 4540               | Battery Positive Voltage |

## Power Distribution: Pickup – Junction Block-Left I/P-Connector X7 (JF4) & X8

### Junction Block - Left I/P - X7 (JF4) Connector Part Information

- OEM: 13516836
- Service: 19149294
- Description: 8-way F GT 280 Series (OG)

#### Terminal Part Information

- |                                                        |                                                        |
|--------------------------------------------------------|--------------------------------------------------------|
| • Pins: 1, 3, 5                                        | • Pins: 2, 4                                           |
| • Terminal/Tray: 13525970/4                            | • Terminal/Tray: 13525970/4                            |
| • Core/Insulation Crimp: E/A                           | • Core/Insulation Crimp: 2/A                           |
| • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) | • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) |

| Junction Block - Left I/P, X7 (JF4) |            |             |                                                     |
|-------------------------------------|------------|-------------|-----------------------------------------------------|
| Pin                                 | Wire Color | Circuit No. | Function                                            |
| 1                                   | 0.5 GY     | 6206        | Low Reference (JF4 +AN3)                            |
| 2                                   | 1 YE       | 5129        | Adjustable Pedals Relay<br>Rearward Control (JF4)   |
| 3                                   | 0.5 TN     | 6207        | 5-Volt Reference (JF4 +AN3)                         |
| 4                                   | 1 PU       | 5130        | Adjustable Pedals Actuator<br>Forward Control (JF4) |
| 5                                   | 0.5 PK     | 5289        | Adjustable Pedal Sensor Signal<br>(JF4 +AN3)        |
| 6-8                                 | --         | --          | Not Used                                            |

### Junction Block - Left I/P - X8 Connector Part Information

- OEM: 13516835
- Service: 19149293
- Description: 8-way F GT 280 Series (GN)

#### Terminal Part Information

- |                                                        |                                                        |
|--------------------------------------------------------|--------------------------------------------------------|
| • Pins: 3                                              | • Pins: 4, 5, 6, 7                                     |
| • Terminal/Tray: 13525970/4                            | • Terminal/Tray: 13525970/4                            |
| • Core/Insulation Crimp: 2/A                           | • Core/Insulation Crimp: E/A                           |
| • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) | • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) |

| Junction Block - Left I/P, X8 |                 |             |                                            |
|-------------------------------|-----------------|-------------|--------------------------------------------|
| Pin                           | Wire Color      | Circuit No. | Function                                   |
| 1-2                           | --              | --          | Not Used                                   |
| 3                             | 1 BK            | 1050        | Ground                                     |
| 4                             | 0.35 YE         | 43          | Accessory Voltage (A48)                    |
| 5                             | 0.35 PU         | 5234        | Passenger Seat Belt Indicator (AL0)        |
| 6                             | 0.35 D-BU       | 2307        | Passenger Air Bag On Indicator<br>Control  |
| 7                             | 0.35<br>D-GN/BK | 2308        | Passenger Air Bag Off Indicator<br>Control |
| 8                             | --              | --          | Not Used                                   |

## Power Distribution: Pickup – Junction Block-Left I/P-Connector X9 & X10

### Junction Block - Left I/P - X9 Connector Part Information

- OEM: 13516831
- Service: 19149289
- Description: 8-way F GT 280 Series (BK)

#### Terminal Part Information

- Terminal/Tray: 13525970/4
- Core/Insulation Crimp: E/A
- Release Tool/Test Probe:  
15315247/J-35616-4A (PU)

| Junction Block - Left I/P, X7 (JF4) |            |             |                                               |
|-------------------------------------|------------|-------------|-----------------------------------------------|
| Pin                                 | Wire Color | Circuit No. | Function                                      |
| 1                                   | 0.35 PK    | 1639        | Ignition 1 Voltage (DF5)                      |
| 2                                   | 0.35       | 5515        | Inside Air Temperature Sensor Assembly        |
| 3                                   | 0.5 OG     | 1054        | Stop Lamp Supply Voltage Signal               |
| 4                                   | 0.35 D-GN  | 734         | Inside Air Temperature Sensor Signal (CJ2)    |
| 5                                   | 0.35 PK    | 1139        | Ignition 1 Voltage (AL0/C99)                  |
| 6                                   | 0.5 WH/BK  | 158         | Courtesy Lamp Supply Voltage                  |
| 7                                   | 0.35 D-GN  | 6101        | Low Reference                                 |
| 8                                   | 0.5 GY     | 157         | Courtesy Lamp Control                         |
|                                     | 0.5 GY     | 157         | Courtesy Lamp Control (Extended Cab/Crew Cab) |

### Junction Block - Left I/P - X10 Connector Part Information

- OEM: 13516830
- Service: 19149291
- Description: 8-way F GT 280 Series (GY)

#### Terminal Part Information

- Terminal/Tray: 13525970/4
- Core/Insulation Crimp: E/A
- Release Tool/Test Probe:  
15315247/J-35616-4A (PU)

| Junction Block - Left I/P, X10 |              |             |                                                         |
|--------------------------------|--------------|-------------|---------------------------------------------------------|
| Pin                            | Wire Color   | Circuit No. | Function                                                |
| 1                              | 0.5 RD/WH    | 240         | Battery Positive Voltage (TRW/5Y0/5X7/UG1)              |
| 2                              | 0.35 OG      | 6815        | Inadvertent Power Control                               |
|                                | 0.35 OG      | 6815        | Inadvertent Power Control (Extended Cab/Crew Cab - YE9) |
| 3                              | 0.35 PK      | 1691        | Low Reference (DF5 +DL3/DR4)                            |
| 4                              | 0.35 BN/WH   | 230         | Instrument Panel Lamps Dimming Control (TRW/UG1/A48)    |
| 5                              | 0.35 YE      | 61          | Low Reference (DF5)                                     |
| 6                              | 0.35 D-GN/WH | 636         | Ambient Air Temperature Sensor Signal (DF5)             |
| 7                              | 0.35 GY      | 1690        | Automatic Day/Night Mirror Signal (DF5 +DI3/DR4)        |
| 8                              | 0.35 D-BU    | 38          | Backup Lamp Relay Control (DF5)                         |

## Power Distribution: Pickup – Junction Block-Left I/P – Connector X11 & X12

### Junction Block - Left I/P - X11 Connector Part Information

- OEM: 13516833
- Service: 19115668
- Description: 8-way F GT 280 Series (L-GY)

#### Terminal Part Information

- **Pins: 1**
  - Terminal/Tray: 13525969/4
  - Core/Insulation Crimp: 4/4
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: 2**
  - Terminal/Tray: 13525969/4
  - Core/Insulation Crimp: F/D
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: 4, 6, 8**
  - Terminal/Tray: 13525970/4
  - Core/Insulation Crimp:
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: 7**
  - Terminal/Tray: 13525970/4
  - Core/Insulation Crimp: 2/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| Junction Block - Left I/P, X11 |            |             |                                                                         |
|--------------------------------|------------|-------------|-------------------------------------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                                                |
| 1                              | 2 RD/WH    | 1340        | Battery Positive Voltage (Crew Cab +A31/Extended Cab +ABV)              |
| 2                              | 3 RD/WH    | 1440        | Battery Positive Voltage                                                |
| 3                              | --         | --          | Not Used                                                                |
| 4                              | 0.5 BN/WH  | 230         | Instrument Panel Lamps Dimming Control (Crew Cab +31/Extended Cab +ABV) |
|                                | 0.5 BN/WH  | 230         | Instrument Panel Lamps Dimming Control (Crew Cab +31/Extended Cab +ABV) |
| 5                              | --         | --          | Not Used                                                                |
| 6                              | 0.35 PK    | 1139        | Ignition 1 Voltage                                                      |
| 7                              | 0.8 RD/WH  | 4440        | Battery Positive Voltage (-AL0)                                         |
|                                | 0.5 RD/WH  | 4440        | Battery Positive Voltage (AL0)                                          |
|                                | 0.35 RD/WH | 4440        | Battery Positive Voltage (AL0)                                          |
| 8                              | 0.5 RD/WH  | 4440        | Battery Positive Voltage (ASF)                                          |

### Junction Block - Left I/P - X12 Connector Part Information

- OEM: 13516834
- Service: 19149292
- Description: 8-way F GT 280 Series (BN)

#### Terminal Part Information

- **Pins: 1, 2, 8**
  - Terminal/Tray: 13525969/4
  - Core/Insulation Crimp: F/D
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: 6**
  - Terminal/Tray: 13525970/4
  - Core/Insulation Crimp: 2/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)

#### Junction Block - Left I/P, X12

| Pin | Wire Color | Circuit No. | Function                       |
|-----|------------|-------------|--------------------------------|
| 1   | 3 RD/WH    | 5040        | Battery Positive Voltage (AN3) |
| 2   | 3 RD/WH    | 3440        | Battery Positive Voltage (A48) |
| 3-5 | --         | --          | Not Used                       |
| 6   | 1 WH/BK    | 158         | Courtesy Lamp Supply Voltage   |
| 7   | --         | --          | Not Used                       |
| 8   | 3 BK       | 2550        | Ground                         |

## Power Distribution: Pickup – Junction Block-Left I/P-Connector X13 & X14

### Junction Block - Left I/P - X13 Connector Part Information

- OEM: 13516832
- Service: 19149290
- Description: 8-way F GT 280 Series (D-BU)

#### Terminal Part Information

- **Pins: 1, 2**
- Terminal/Tray: 13525970/4
- Core/Insulation Crimp: 2/A
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: 3, 4, 5, 6, 7, 8**
- Terminal/Tray: 13525970/4
- Core/Insulation Crimp: E/A
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| Junction Block - Left I/P, X13 |            |             |                                                     |
|--------------------------------|------------|-------------|-----------------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                            |
| 1                              | 1 PU       | 5130        | Adjustable Pedals Relay Forward Control (JF4 +AN3)  |
| 2                              | 1 YE       | 5129        | Adjustable Pedals Relay Rearward Control (JF4 +AN3) |
| 3                              | 0.35 PU    | 5286        | Adjustable Pedals Relay Forward Control (JF4 +AN3)  |
| 4                              | 0.35 OG/BK | 5825        | Adjustable Pedals Relay Rearward Control (JF4 +AN3) |
| 5                              | 0.5 TN     | 6207        | Memory Sensor High Reference (JF4 +AN3)             |
| 6                              | 0.5 PK     | 5289        | Adjustable Pedal Sensor Signal (JF4 +AN3)           |
| 7                              | 0.5 GY     | 6206        | Low Reference (JF4 +AN3)                            |
| 8                              | 0.35 YE    | 43          | Accessory Voltage (A31 -AN3/DL3)                    |
|                                | 0.35 YE    | 43          | Accessory Voltage (A31 -AN3/DL3)                    |
|                                | 0.35 PU/WH | 6205        | 12-Volt Reference (JF4 +AN3)                        |

### Junction Block - Left I/P - X14 Connector Part Information

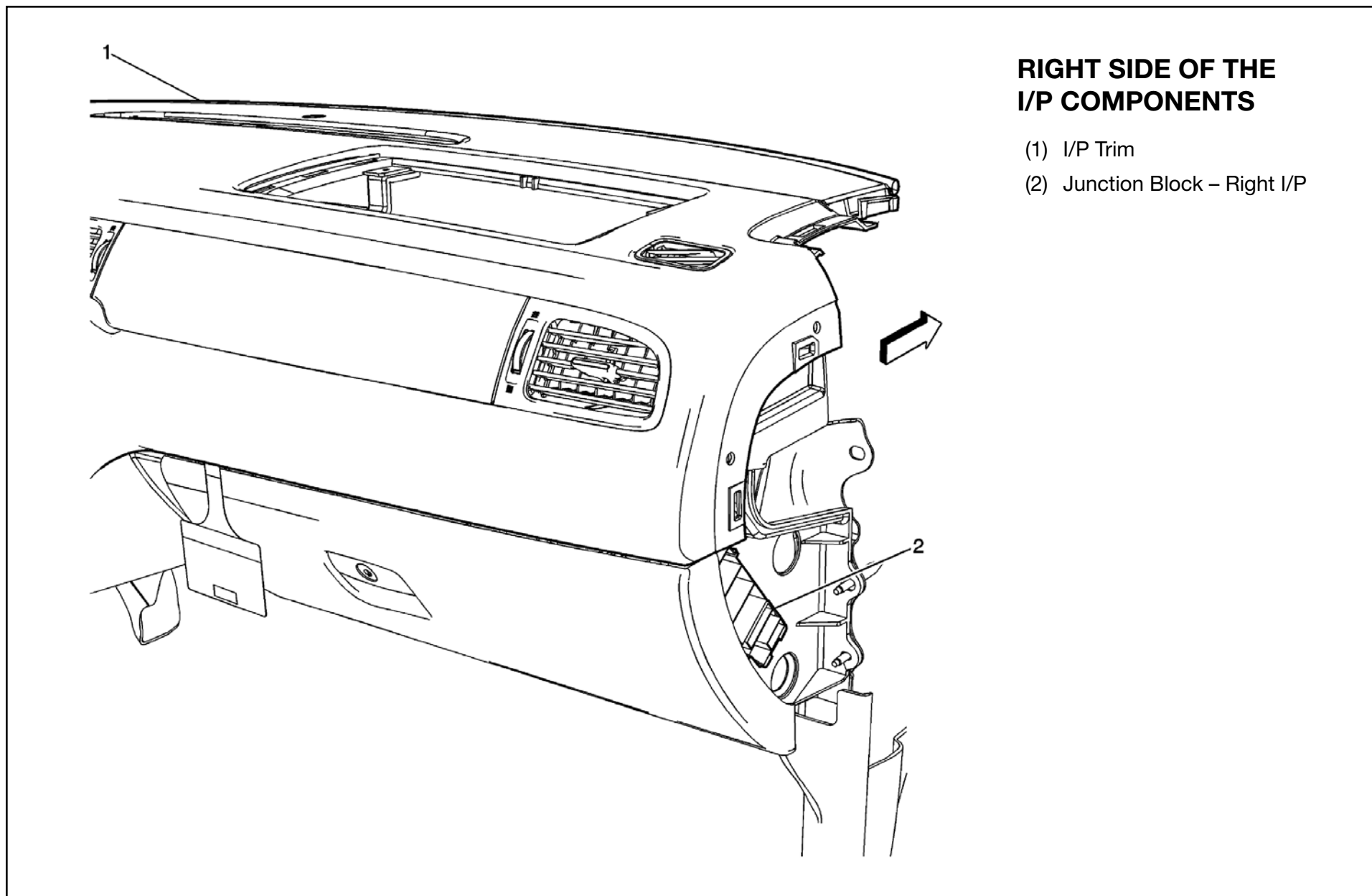
- OEM: 13516837
- Service: See Catalog
- Description: 8-way F GT 280 Series (BK)

#### Terminal Part Information

- Terminal/Tray: See Terminal Repair Kit
- Core/Insulation Crimp: See Terminal Repair Kit
- Core/Insulation Crimp: See Terminal Repair Kit

| Junction Block - Left I/P, X14 |            |             |                                |
|--------------------------------|------------|-------------|--------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                       |
| 1                              | 0.5 BK     | 1050        | Ground (5Y0/5X7)               |
| 2-4                            | --         | --          | Not Used                       |
| 5                              | 3 RD/WH    | 2340        | Battery Positive Voltage (5Y0) |
| 6-7                            | --         | --          | Not Used                       |
| 8                              | 0.5 YE     | 43          | Accessory Voltage (9L4)        |

## Power Distribution: Pickup – Junction Block-Right I/P-Fuse Block Location View



## Power Distribution: Pickup – Junction Block-Right I/P-Connector X1

### Junction Block - Right I/P - X1 Connector Part Information

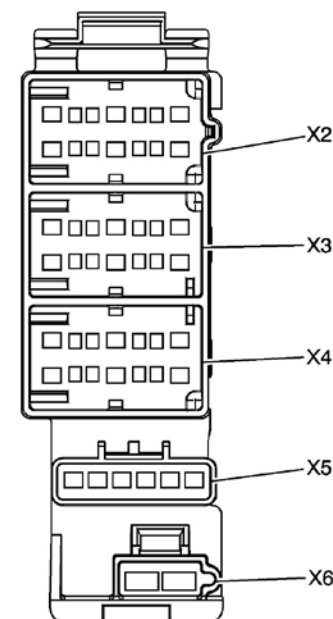
- OEM: 15489487
- Service: See Catalog
- Description: 40-way F (BK)

#### Terminal Part Information

- |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• <b>Pins: 2A4, 2B4, 3B1, 5A, 5C, 5D, 5E, 5F</b></li><li>• Terminal/Tray: 15304722/8</li><li>• Core/Insulation Crimp: E/C</li><li>• Release Tool/Test Probe: 15315247/J-35616-5 (PU)</li></ul>                                                                           | <ul style="list-style-type: none"><li>• <b>Pins: 2B1, 3B4</b></li><li>• Terminal/Tray: 15304724/8</li><li>• Core/Insulation Crimp: C/D</li><li>• Release Tool/Test Probe: See Terminal Repair Kit</li></ul> |
| <ul style="list-style-type: none"><li>• <b>Pins: 3A1, 3A4</b></li><li>• Terminal/Tray: 15304724/8</li><li>• Core/Insulation Crimp: 2/A</li><li>• Release Tool/Test Probe: See Terminal Repair Kit</li></ul>                                                                                                    | <ul style="list-style-type: none"><li>• <b>Pins: 6A</b></li><li>• Terminal/Tray: 12066493/3</li><li>• Core/Insulation Crimp: B/G</li><li>• Release Tool/Test Probe: 12094430/J-35616-43 (RD)</li></ul>      |
| <ul style="list-style-type: none"><li>• <b>Pins: 2A2, 2A3, 2B3, 2B6, 2B7, 3A7, 4A1, 4A2, 4A3, 4A4, 4A5, 4A6, 4A7, 4B2, 4B3, 4B5, 4B6, 5B</b></li><li>• Terminal/Tray: 15304724/8</li><li>• Core/Insulation Crimp: See Terminal Repair Kit</li><li>• Release Tool/Test Probe: See Terminal Repair Kit</li></ul> | <ul style="list-style-type: none"><li>• <b>Pins: 6B</b></li><li>• Terminal/Tray: 12066493/3</li><li>• Core/Insulation Crimp: F/G</li><li>• Release Tool/Test Probe: 12094430/J-35616-43 (RD)</li></ul>      |

(continued on Pg. B-28)

**Junction  
Block-Right I/P  
(Wire Entry),  
Top View**



**Junction Block-Right I/P (Wire Entry), Bottom View**



## Power Distribution: Pickup – Junction Block-Right I/P-Connector X1 (cont'd)

### Junction Block - Right I/P - X1 Connector Part Information

(continued from Pg. B-27)

| Junction Block - Right I/P, X1 |            |             |                                             |
|--------------------------------|------------|-------------|---------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                    |
| 2A1                            | --         | --          | Not Used                                    |
| 2A2                            | 0.35 TN    | 481         | Outside Moisture Signal 1 (CE1)             |
| 2A3                            | 0.35 L-GN  | 482         | Outside Moisture Signal 2 (CE1)             |
| 2A4                            | 0.35 WH    | 2283        | Ignition Voltage (CE1)                      |
|                                | 0.35 WH    | 2283        | Ignition Voltage (NQH/NQF +CE1)             |
| 2A5-2A6                        | --         | --          | Not Used                                    |
| 2A7                            | --         | --          | Ground Bus                                  |
| 2B1                            | 0.35 RD/WH | 3140        | Battery Positive Voltage (CF5/TRW)          |
| 2B2                            | 0.5 BN     | 2509        | Left Front Park Lamps Supply Voltage (U01)  |
| 2B3                            | 0.35 YE    | 43          | Accessory Voltage (CF5)                     |
| 2B4                            | 0.5 BN/WH  | 230         | Instrument Panel lamp Dimming Control (CF5) |
| 2B5                            | 0.5 WH     | 5990        | Emergency Lamp Switch Signal (5Y0/5X7)      |
| 2B6                            | 0.5 BK     | 1050        | Ground                                      |
| 2B7                            | 0.35 OG    | 300         | Ignition 3 Voltage (Export w/CF5)           |
| 3A1                            | 0.5 D-GN   | 117         | Right Front Speaker Output (-)              |
| 3A2                            | 0.5 L-GN   | 200         | Right Front Speaker Output (+)              |
| 3A3                            | 0.35 BK    | 1850        | Ground                                      |

(continued from column at left)

| Junction Block - Right I/P, X1 |             |             |                                                       |
|--------------------------------|-------------|-------------|-------------------------------------------------------|
| Pin                            | Wire Color  | Circuit No. | Function                                              |
| 3A4                            | 0.8 D-BU/WH | 1315        | Right Front Turn Signal Lamp Supply Voltage (DL3/DPN) |
|                                | 0.8 D-BU/WH | 1315        | Right Front Turn Signal Lamp Supply Voltage (DL3/DPN) |
|                                | 0.35 L-BU   | 224         | Passenger Door Lock Switch Lock Signal (AU3-YE9)      |
| 3A5                            | 0.35 TN/WH  | 746         | Right Front Door Ajar Switch Signal (-AN3/DL3)        |
| 3A6                            | 0.8 GY      | 295         | Door Lock Actuator Lock Control (AU3 -AN3/DL3)        |
| 3A7                            | 3 BK        | 1050        | Ground                                                |
| 3B1                            | 0.35 D-GN   | 5060        | Low Speed GMLAN Serial Data (YE9 +AN3/DL3)            |
| 3B2                            | 0.8 RD/WH   | 240         | Battery Positive Voltage                              |
| 3B3                            | 0.8 TN      | 294         | Door Lock Actuator Unlock Control (AU3 -AN3/DL3)      |
| 3B4                            | 2 RD/WH     | 1340        | Battery Positive Voltage (A31)                        |
|                                | 0.35 D-BU   | 245         | Passenger Door Lock Switch Unlock Signal (AU3 -YE9)   |
| 3B5                            | 0.35 BN/WH  | 230         | Instrument Panel Lamp Dimming Control (AU3)           |
| 3B6                            | 0.35 OG     | 5922        | Passenger Door Open Signal (-AN3/DL3)                 |
| 3B7                            | --          | --          | Ground Bus                                            |
| 4A1                            | 0.35 GY     | 598         | 5-Volt Reference                                      |
| 4A2                            | 0.35 TN     | 520         | Lower Right Air Temperature Sensor Signal (CJ2)       |

(continued on Pg. B-29)

## **Power Distribution: Pickup – Junction Block-Right I/P-Connector X1 (cont'd)**

(continued from Pg. B-28)

| Junction Block - Right I/P, X1 |            |             |                                                  |
|--------------------------------|------------|-------------|--------------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                         |
| 4A3                            | 0.35 TN    | 518         | Lower Left Air Temperature Sensor Signal (CJ2)   |
| 4A4                            | 0.35 YE    | 1791        | Low Reference                                    |
| 4A5                            | 0.35 PU    | 1838        | Recirculation Door Position Signal (CJ2)         |
| 4A6                            | 0.35 GY/BK | 754         | Blower Motor Speed Control                       |
| 4A7                            | 3 BK       | 1050        | Ground                                           |
| 4B1                            | --         | --          | 5-Volt Reference Bus                             |
| 4B2                            | 0.35 D-BU  | 1199        | Air Temperature Door Control                     |
| 4B3                            | 0.35 TN    | 2273        | Mode Door Control                                |
| 4B4                            | --         | --          | Low Reference Bus                                |
| 4B5                            | 0.35 YE/BK | 713         | Defrost/Heater Mode Valve Position Sensor Signal |

(continued from column at left)

| Junction Block - Right I/P, X1 |            |             |                                                |
|--------------------------------|------------|-------------|------------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                       |
| 4B6                            | 0.35 L-BU  | 733         | Air Temperature Door Position Signal           |
| 4B7                            | --         | --          | Ground Bus                                     |
| 5A                             | 0.35 D-GN  | 6101        | Low Reference                                  |
| 5B                             | 0.35 PK    | 839         | Ignition 1 Voltage                             |
|                                | 0.35 PK    | 839         | Ignition 1 Voltage                             |
| 5C                             | 0.35 PK    | 839         | Ignition 1 Voltage                             |
| 5D                             | 0.35 D-BU  | 1646        | Auxiliary Air Temperature Door Position Signal |
| 5E                             | 0.35 WH/BK | 1236        | Auxiliary Air Temperature Door Control         |
| 5F                             | 0.35 D-GN  | 1614        | Recirculation Door Control                     |
| 6A                             | 5 RD/BK    | 542         | Battery Positive Voltage                       |
| 6B                             | 3 BK       | 1050        | Ground                                         |
|                                | 3 BK       | 1050        | Ground                                         |

## Power Distribution: Pickup – Junction Block-Right I/P-Connector X2

### Junction Block - Right I/P - X2 Connector Part Information

- OEM: 15467621
- Service: 19115663
- Description: 14-way F GT 150/280 Series (GY)

#### Terminal Part Information

- **Pins: B2, B3**
  - Terminal/Tray: 12191812/19
  - Core/Insulation Crimp: E/C
  - Release Tool/Test Probe: 15315247/J-35616-2A (GY)
- **Pins: A7, B4**
  - Terminal/Tray: 15304711/8
  - Core/Insulation Crimp: E/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: A7, B1**
  - Terminal/Tray: 15304713/19
  - Core/Insulation Crimp: F/D
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| Junction Block - Right I/P, X2 |            |             |                                 |
|--------------------------------|------------|-------------|---------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                        |
| A1                             | --         | --          | Not Used                        |
| A2                             | 0.35 TN    | 481         | Outside Moisture Signal 1 (CE1) |
| A3                             | 0.35 L-GN  | 482         | Outside Moisture Signal 2 (CE1) |
| A4                             | 0.35 WH    | 2283        | Ignition Voltage (CE1)          |

(continued from column at left)

| Junction Block - Right I/P, X2 |            |             |                                              |
|--------------------------------|------------|-------------|----------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                     |
| A5-A6                          | --         | --          | Not Used                                     |
| A7                             | 3 BK       | 1050        | Ground (CF5/TRW)                             |
|                                | 0.5 BK     | 1050        | Ground (U01)                                 |
| B1                             | 3 RD/WH    | 3140        | Battery Positive Voltage (CF5/TRW)           |
| B2                             | 0.5 BN     | 2509        | Left Front Park Lamps Supply Voltage (U01)   |
| B3                             | 0.35 YE    | 43          | Accessory Voltage (CF5)                      |
| B4                             | 0.5 BN/WH  | 230         | Instrument Panel Lamps Dimming Control (CF5) |
| B5                             | 0.5 WH     | 5990        | Emergency Lamp Switch Signal (5Y0/5X7)       |
| B6                             | 0.35 BK    | 1050        | Ground (CE1)                                 |
| B7                             | --         | --          | Not Used                                     |

## Power Distribution: Pickup – Junction Block-Right I/P-Connector X3

### Junction Block - Right I/P - X3 Connector Part Information

- OEM: 15467622
- Service: 19115664
- Description: 14-way F GT 150/280 Series (L-GY)

#### Terminal Part Information

- **Pins: A1**
  - Terminal/Tray: 15304711/8
  - Core/Insulation Crimp: 2/A
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: A2, A6, B2, B3**
  - Terminal/Tray: 12191812/19
  - Core/Insulation Crimp: C/A
  - Release Tool/Test Probe: 15315247/J-35616-2A (GY)
- **Pins: A3, A5, B5, B6**
  - Terminal/Tray: 12191812/19
  - Core/Insulation Crimp: E/C
  - Release Tool/Test Probe: 15315247/J-35616-2A (GY)
- **Pins: A7**
  - Terminal/Tray: 15304713/19
  - Core/Insulation Crimp: F/D
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: B4**
  - Terminal/Tray: 15304713/19
  - Core/Insulation Crimp: 4/4
  - Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| Junction Block - Right I/P, X3 |             |             |                                                       |
|--------------------------------|-------------|-------------|-------------------------------------------------------|
| Pin                            | Wire Color  | Circuit No. | Function                                              |
| A1                             | 0.8 D-GN    | 117         | Right Front Speaker Output (-)                        |
| A2                             | 0.8 L-GN    | 200         | Right Front Speaker Output (+)                        |
| A3                             | 0.35 BK     | 1850        | Ground (-AN3/DL3)                                     |
| A4                             | 0.5 D-BU/WH | 1315        | Right Front Turn Signal Lamp Supply Voltage (DL3/DPN) |
|                                | 0.35 L-BU   | 244         | Passenger Door Lock Switch Lock Signal (AU3 -YE9)     |

(continued from column at left)

| Junction Block - Right I/P, X3 |            |             |                                                       |
|--------------------------------|------------|-------------|-------------------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                              |
| A5                             | 0.35 TN/WH | 746         | Right Front Door Ajar Switch Signal (-AN3/DL3)        |
| A6                             | 1 GY       | 295         | Door Lock Actuator Lock Control (AU3 -AN3/DL3)        |
| A7                             | 3 BK       | 1050        | Ground (A31/AN3/DL3/DL8/DPN)                          |
| B1                             | 0.35 D-GN  | 5060        | Low Speed GMLAN Serial Data (AN3/DL3)                 |
| B2                             | 0.8 RD/WH  | 240         | Battery Positive Voltage                              |
| B3                             | 1 TN       | 294         | Door Lock Actuator Unlock Control (AU3 -AN3/DL3)      |
| B4                             | 2 RD/WH    | 1340        | Battery Positive Voltage (A31)                        |
|                                | 0.35 D-BU  | 245         | Passenger Door Lock Switch Unlock Signal (AU3 -YE9)   |
| B5                             | 0.35 BN/WH | 230         | Instrument Panel Lamps Dimming Control (AU3 -AN3/DL3) |
| B6                             | 0.35 OG    | 5922        | Non-Driver Door Open Switch Signal (-AN3/DL3)         |
| B7                             | --         | --          | Not Used                                              |

## Power Distribution: Pickup – Junction Block-Right I/P-Connector X4

### Junction Block - Right I/P - X4 Connector Part Information

- OEM: 15467620
- Service: 19115662
- Description: 14-way F GT 150/280 Series (BK)

#### Terminal Part Information

- Pins: A1, A4, B1, B4
- Terminal/Tray: 15304711/8
- Core/Insulation Crimp: 2/A
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- Pins: A2, A3, A5, A6, B2, B3, B5, B6
- Terminal/Tray: 12191812/19
- Core/Insulation Crimp: E/C
- Release Tool/Test Probe: 15315247/J-35616-2A (GY)

| Junction Block - Right I/P, X4 |              |             |                                                 |
|--------------------------------|--------------|-------------|-------------------------------------------------|
| Pin                            | Wire Color   | Circuit No. | Function                                        |
| A1                             | 0.35 L-BU/BK | 598         | 5-Volt Reference                                |
|                                | 0.35 L-BU/BK | 598         | 5-Volt Reference (C67/CJ2)                      |
| A2                             | 0.35 TN      | 520         | Lower Right Air Temperature Sensor Signal (CJ2) |
| A3                             | 0.35 TN      | 518         | Lower Left Air Temperature Sensor Signal (CJ2)  |

(continued from column at left)

| Junction Block - Right I/P, X4 |             |             |                                                 |
|--------------------------------|-------------|-------------|-------------------------------------------------|
| Pin                            | Wire Color  | Circuit No. | Function                                        |
| A4                             | 0.35 YE     | 1791        | Low Reference                                   |
|                                | 0.35 YE     | 1791        | Low Reference (C67/CJ2)                         |
| A5                             | 0.35 PU     | 1838        | Recirculation Door Position Signal (CJ2)        |
| A6                             | 0.35 PU/WH  | 754         | Blower Motor Speed Control                      |
| A7                             | --          | --          | Not Used                                        |
| B1                             | 0.35L-BU/WH | 598         | 5-Volt Reference                                |
|                                | 0.35L-BU/WH | 598         | 5-Volt Reference (CJ2)                          |
| B2                             | 0.35 D-BU   | 1199        | Left Air Temperature Door Control (CJ2)         |
| B3                             | 0.35 TN     | 2273        | Mode Door Control                               |
| B4                             | 0.35 YE     | 1791        | Low Reference                                   |
|                                | 0.35 YE     | 1791        | Low Reference (CJ2)                             |
| B5                             | 0.35 L-GN   | 713         | Mode Door Position Signal                       |
| B6                             | 0.35 L-BU   | 733         | Left Air Temperature Door Position Signal (CJ2) |
| B7                             | --          | --          | Not Used                                        |

## Power Distribution: Pickup – Junction Block-Right I/P-Connector X5 & X6

### Junction Block - Right I/P - X5 Connector Part Information

- OEM: 15326900
- Service: 15606380
- Description: 6-way F GT 280 Series (BK)

#### Terminal Part Information

- |                                                        |                                                        |
|--------------------------------------------------------|--------------------------------------------------------|
| • <b>Pins: A-C</b>                                     | • <b>Pins: D-F</b>                                     |
| • Terminal/Tray: 15304711/8                            | • Terminal/Tray: 15304711/8                            |
| • Core/Insulation Crimp: 2/A                           | • Core/Insulation Crimp: E/A                           |
| • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) | • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) |

| Junction Block - Right I/P, X4 |            |             |                                            |
|--------------------------------|------------|-------------|--------------------------------------------|
| Pin                            | Wire Color | Circuit No. | Function                                   |
| A                              | 0.35 D-GN  | 6101        | Low Reference (CJ2)                        |
|                                | 0.35 D-GN  | 6101        | Low Reference (CJ2)                        |
| B                              | 0.35 BN    | 839         | Ignition 1 Voltage                         |
|                                | 0.35 BN    | 839         | Ignition 1 Voltage (C67/CJ2)               |
| C                              | 0.35 BN    | 839         | Ignition 1 Voltage                         |
|                                | 0.35 BN    | 839         | Ignition 1 Voltage (CJ2)                   |
| D                              | 0.35 D-BU  | 1646        | Right Air Temperature Door Position Signal |
| E                              | 0.35 WH/BK | 1236        | Right Air Temperature Door Control         |
| F                              | 0.35 D-GN  | 1614        | Recirculation Door Control (C67/CJ2)       |

### Junction Block - Right I/P - X6 Connector Part Information

- OEM: 12129939
- Service: 15306380
- Description: 2-way F Metri-Pack Series (BK)

#### Terminal Part Information

- Terminal/Tray: 12084590/3
- Core/Insulation Crimp: F/G
- Release Tool/Test Probe:  
12094430/J-35616-42 (RD)

| Junction Block - Right I/P, X6 |            |             |                          |
|--------------------------------|------------|-------------|--------------------------|
| Pin                            | Wire Color | Circuit No. | Function                 |
| A                              | 3 RD       | 542         | Battery Positive Voltage |
| B                              | 3 BK       | 1050        | Ground                   |

## Power Distribution: Pickup – Junction Block-Rear Lamps – Connector X1

### Junction Block - Rear Lamps - X1 Connector Part Information

- OEM: 15317304
- Service: 15306114
- Description: 8-way F GT 280 Sealed (BU)

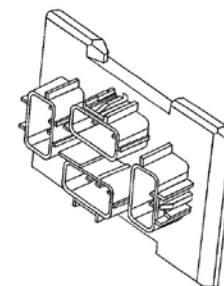
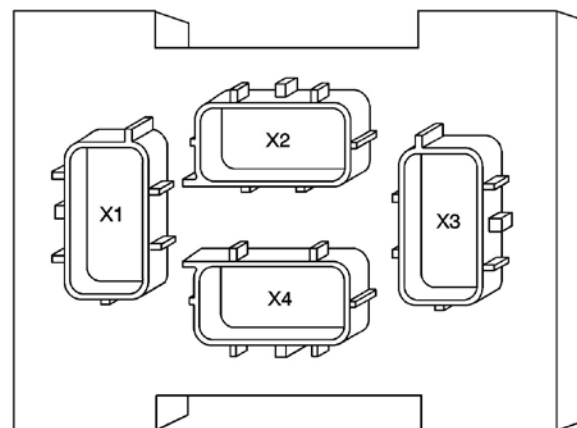
#### Terminal Part Information

- Pins: A, C, D, G, H
- Pins: B, E
- Terminal/Tray: 15304716/8
- Terminal/Tray: 15304717/8
- Core/Insulation Crimp: 2/1
- Core/Insulation Crimp: 4/1
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)

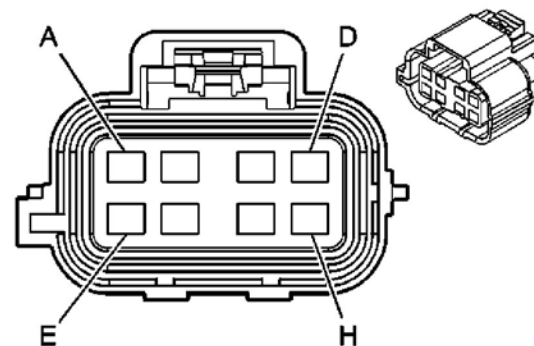
#### Junction Block - Rear Lamps, X1

| Pin | Wire Color | Circuit No. | Function                                 |
|-----|------------|-------------|------------------------------------------|
| A   | 0.5 YE     | 18          | Left Rear Stop/Turn Lamp Supply Voltage  |
| B   | 2 BK       | 2150        | Ground                                   |
| C   | 0.8 L-GN   | 24          | Backup Lamp Supply Voltage               |
| D   | 0.5 BN     | 2609        | Right Rear Park Lamps Supply Voltage     |
| E   | 2 BK       | 1750        | Ground                                   |
| F   | --         | --          | Not Used                                 |
| G   | 0.8 BN     | 2509        | Left Rear Park Lamp Supply Voltage       |
| H   | 0.5 D-GN   | 19          | Right Rear Stop/Turn Lamp Supply Voltage |

### Junction Block- Rear Lamps



### Junction Block- Rear Lamps X1



## Power Distribution: Pickup – Junction Block-Rear Lamps – Connector X2 & X3

### Junction Block - Rear Lamps - X2 Connector Part Information

- OEM: 15317305
- Service: 15306338
- Description: 8-way F GT 280 Sealed (GY)

#### Terminal Part Information

- **Pins: A, C, D, G, H**
- Terminal/Tray: 15304716/8
- Core/Insulation Crimp: 2/1
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)
- **Pins: B, E**
- Terminal/Tray: 15304717/8
- Core/Insulation Crimp: 4/1
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| Junction Block - Rear Lamps, X2 |            |             |                                         |
|---------------------------------|------------|-------------|-----------------------------------------|
| Pin                             | Wire Color | Circuit No. | Function                                |
| A-B                             | --         | --          | Not                                     |
| C                               | 0.8 BK     | 1750        | Ground                                  |
| D                               | --         | --          | Not Used                                |
| E                               | 0.8 BN     | 2509        | Left Rear Park Lamps Supply Voltage     |
| F                               | 0.8 L-GN   | 24          | Backup Lamp Supply Voltage              |
| G                               | --         | --          | Not Used                                |
| G                               | 0.8 BN     | 2509        | Left Rear Park Lamp Supply Voltage      |
| H                               | 0.8 YE     | 18          | Left Rear Stop/Turn Lamp Supply Voltage |

### Junction Block - Rear Lamps - X3 Connector Part Information

- OEM: 15317308
- Service: 15306135
- Description: 8-way F GT 280 Sealed 5.2 (BN)

#### Terminal Part Information

- Terminal/Tray: 15304716/8
- Core/Insulation Crimp: E/1
- Release Tool/Test Probe: 15315247/J-35616-4A (PU)

| Junction Block - Rear Lamps, X3 |            |             |                                            |
|---------------------------------|------------|-------------|--------------------------------------------|
| Pin                             | Wire Color | Circuit No. | Function                                   |
| A                               | 0.5 BN     | 2609        | Right Rear Park Lamps Supply Voltage       |
| B                               | 0.5 BN     | 2609        | Right Rear Park Lamps Supply Voltage (R05) |
| C                               | 0.5 BK     | 1750        | Ground (R05)                               |
| D                               | 0.5 BK     | 1750        | Ground (R05)                               |
| E                               | 0.5 BK     | 1750        | Ground                                     |
| F                               | 0.5 BN     | 2509        | Left Rear Park Lamps Supply Voltage (R05)  |
| G                               | 0.5 BN     | 2509        | Left Rear Park Lamps Supply Voltage        |
| H                               | 0.5 BK     | 1750        | Ground                                     |

## Power Distribution: Pickup – Junction Block-Rear Lamps – Connector X4

### Junction Block - Rear Lamps - X4 Connector Part Information

- OEM: 15317306
- Service: 15306339
- Description: 8-way F GT 280 Sealed 5.2 (BK)

#### Terminal Part Information

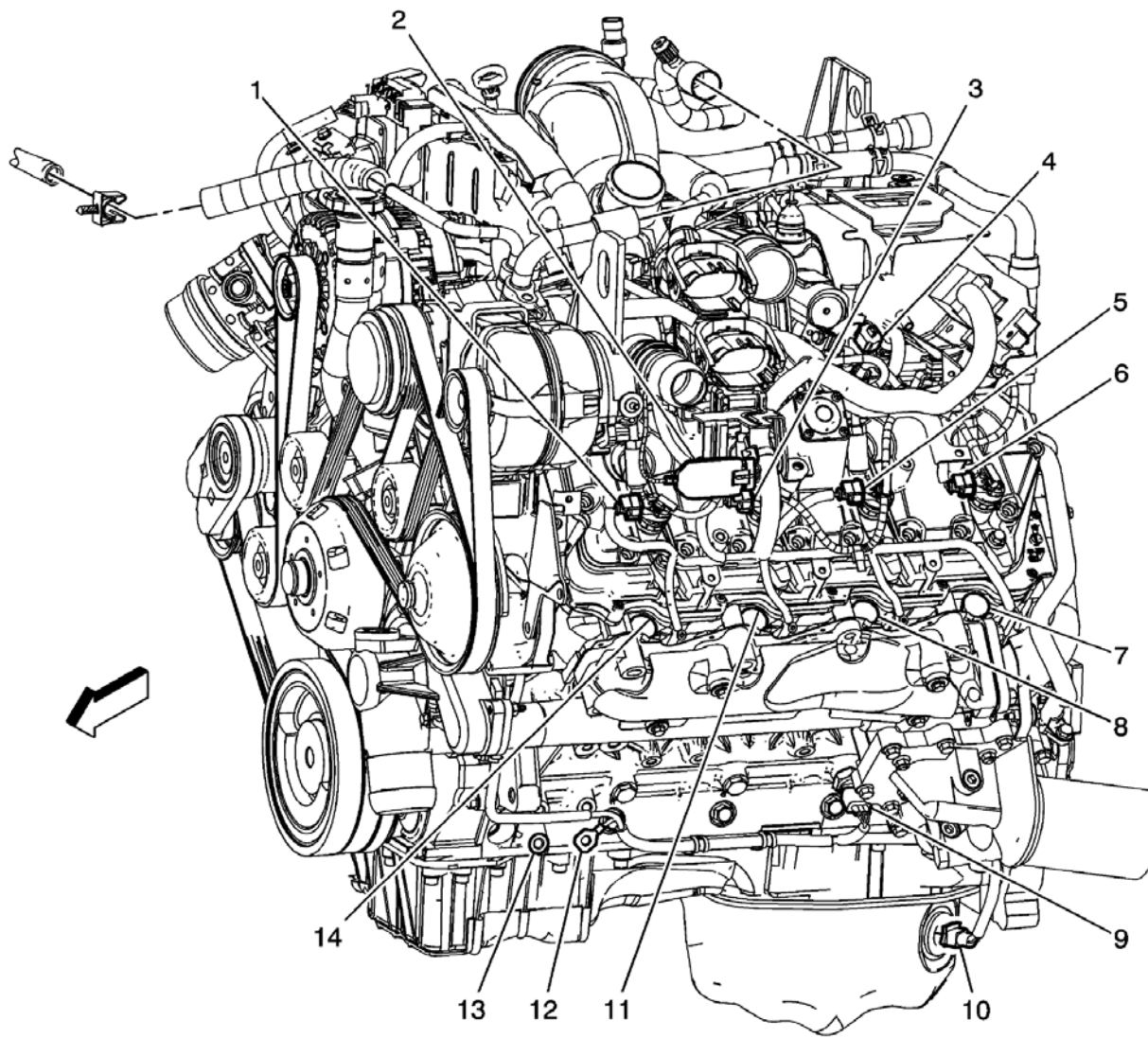
- Terminal/Tray: 15304716/8
- Core/Insulation Crimp: E/1
- Release Tool/Test Probe:  
15315247/J-35616-4A (PU)

| Junction Block - Rear Lamps, X4 |            |             |                                             |
|---------------------------------|------------|-------------|---------------------------------------------|
| Pin                             | Wire Color | Circuit No. | Function                                    |
| A                               | 0.8 BK     | 2150        | Ground                                      |
| B                               | 0.8 BN     | 2609        | Right Rear Park Lamps<br>Supply Voltage     |
| C-D                             | --         | --          | Not Used                                    |
| E                               | 0.8 L-GN   | 24          | Backup Lamp Supply Voltage                  |
| F                               | 0.8 D-GN   | 19          | Right Rear Stop/Turn Lamp<br>Supply Voltage |
| G-H                             | --         | --          | Not Used                                    |

## Ground Distribution: Diesel Ground – 2007 Chevrolet Silverado - 4WD

### Left Side of Engine (Diesel)

- (1) Fuel Injector 2
- (2) Turbocharger Vane Position Sensor
- (3) Fuel Injector 4
- (4) Fuel Rail Pressure Sensor
- (5) Fuel Injector 6
- (6) Fuel Injector 8
- (7) Glow Plug 8
- (8) Glow Plug 6
- (9) Engine Oil Level Switch
- (10) Engine Oil Pressure (EOP) Sensor
- (11) Glow Plug 4
- (12) G106
- (13) G102
- (14) Glow Plug 2

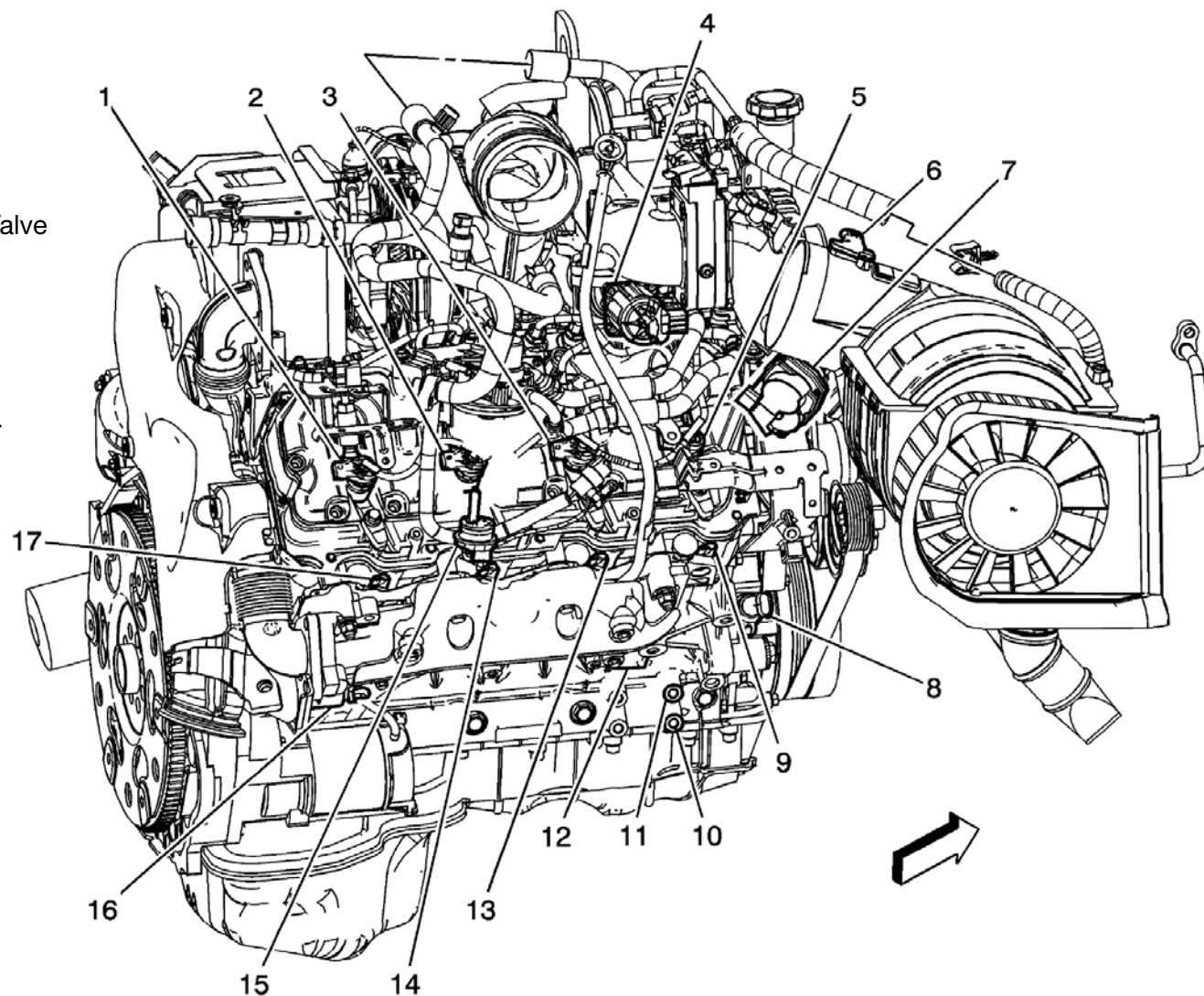


1871192

## Ground Distribution: Diesel Ground – 2007 Chevrolet Silverado - 4WD

### Right Side of Engine (Diesel)

- (1) Fuel Injector 7
- (2) Fuel Injector 5
- (3) Fuel Injector 3
- (4) Exhaust Gas Recirculation (EGR) Valve
- (5) Fuel Injector 1
- (6) Mass Air Flow (MAF)/Intake Air Temperature (IAT) Sensor
- (7) Intake Air Valve
- (8) Crankshaft Position (CKP) Sensor
- (9) Glow Plug 1
- (10) G103
- (11) G105
- (12) Block Heater
- (13) Glow Plug 3
- (14) Glow Plug 5
- (15) Water In Fuel Sensor
- (16) Starter
- (17) Glow Plug 7

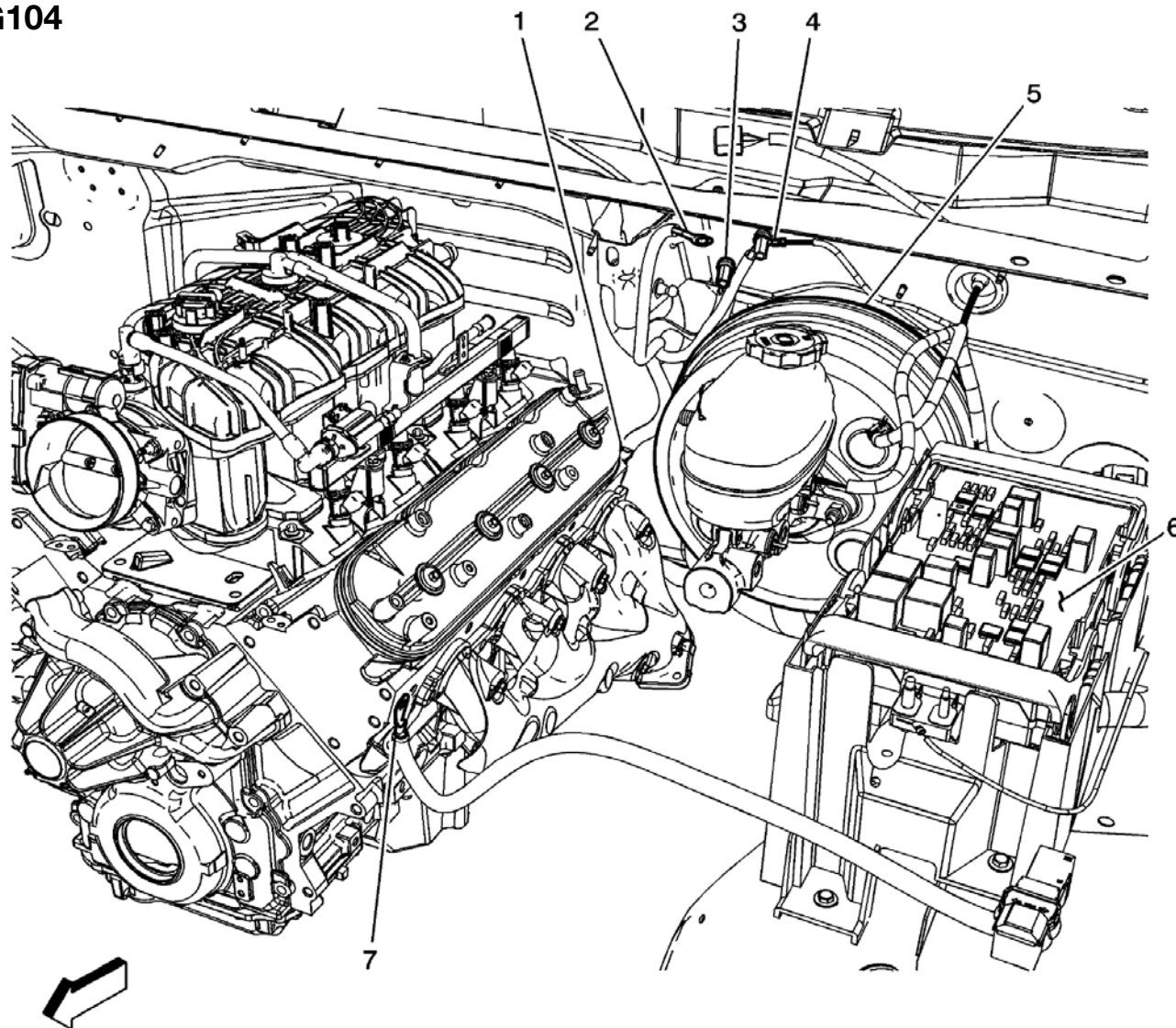


1871149

## Ground Distribution: G107, G108, F110, G111, and G104 Grounds

### G107, G108, G110, G111, and G104

- (1) G107 (4.3L)
- (2) G111 (XA7)
- (3) G108
- (4) G110 (XA7)
- (5) Brake Booster Assembly
- (6) Fuse Block-Underhood
- (7) G104 (6A6)

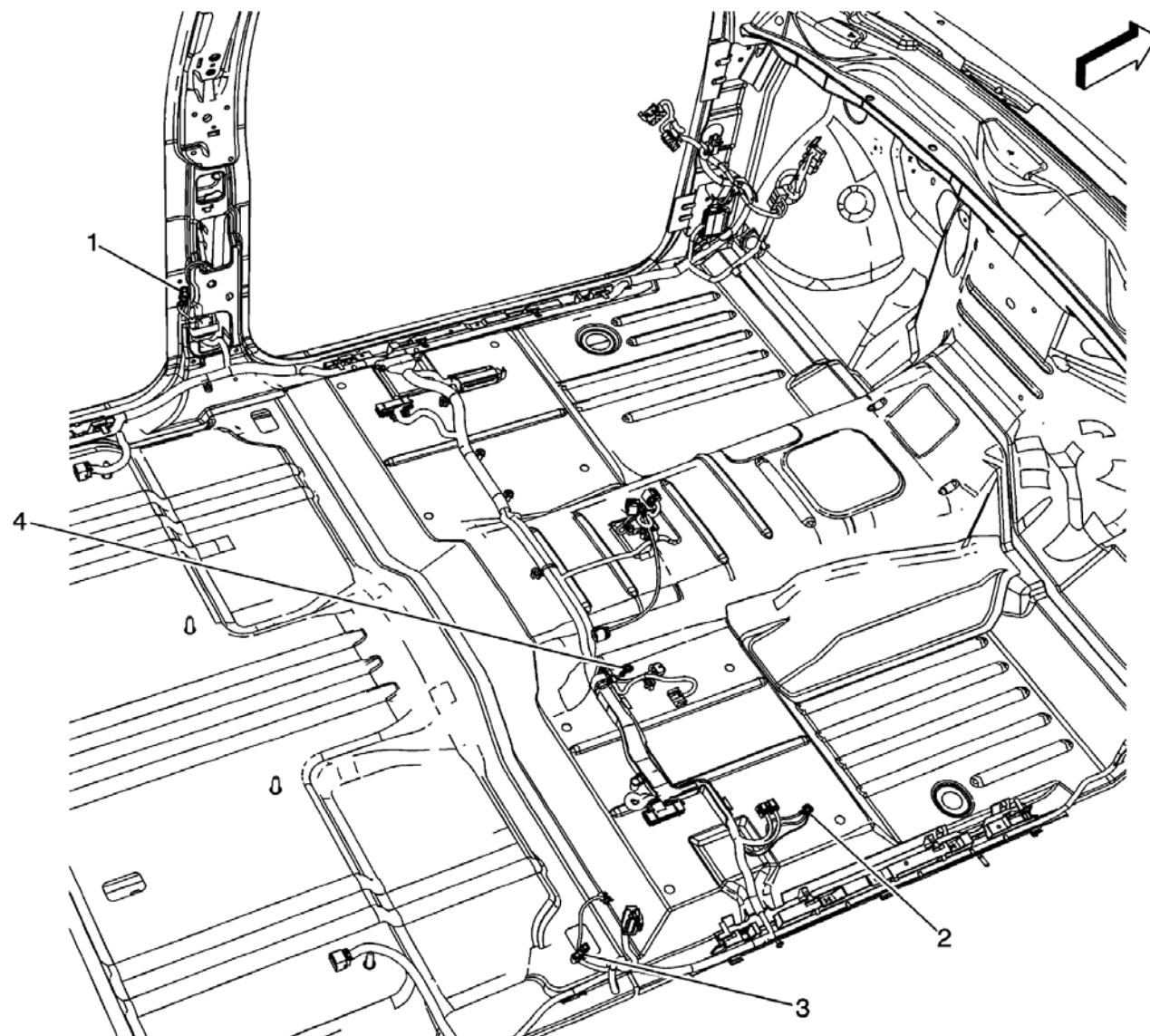


1888648

## Ground Distribution: G301, G302, G303, and G304 Grounds

### G301, G302, G303 and G304

- (1) G303
- (2) G302
- (3) G304
- (4) G301

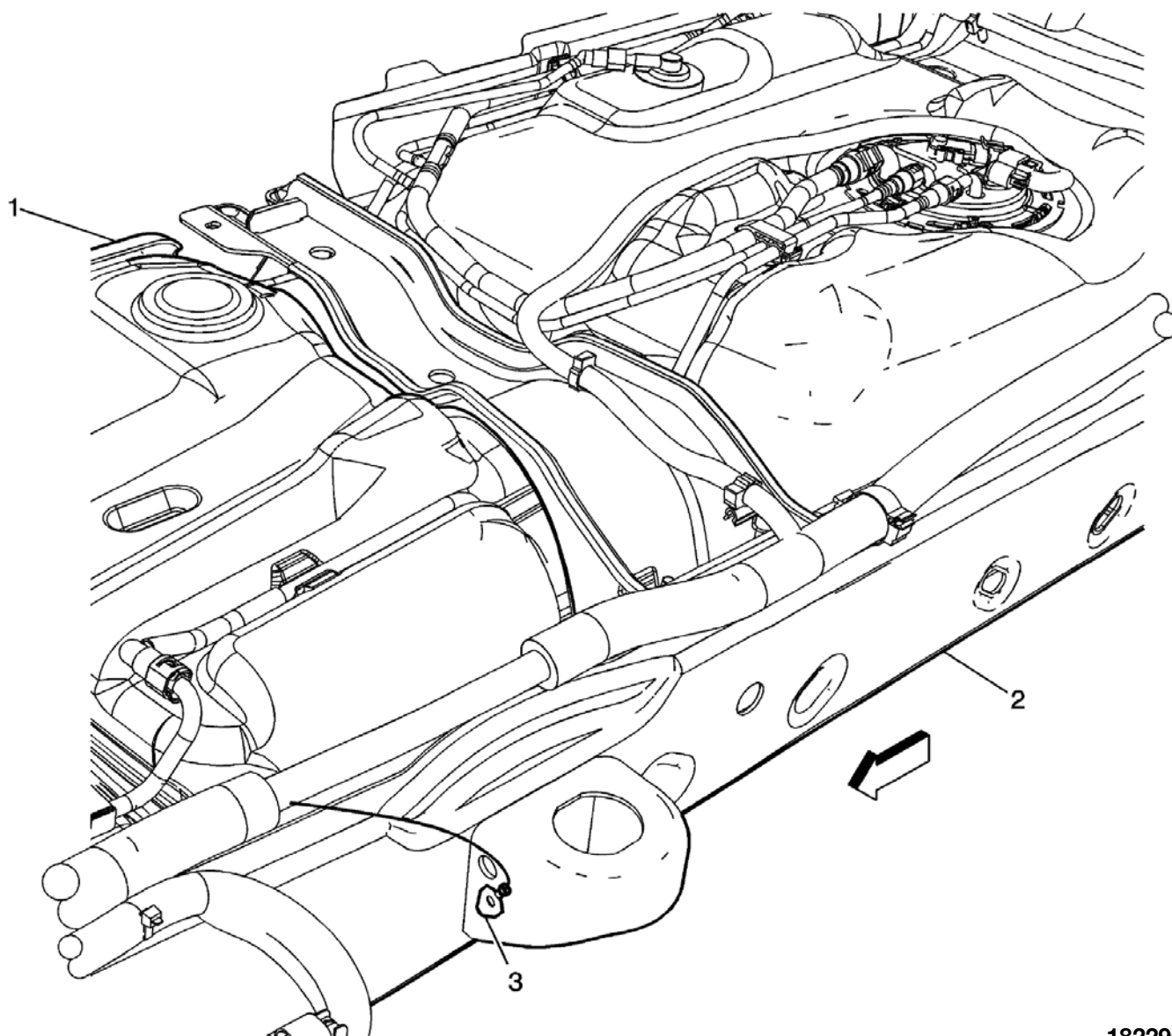


1822906

## Ground Distribution: G305 Ground

### **G305**

- (1) Fuel Tank
- (2) Frame
- (3) G305



1822905

## Electrical Component Locations

| Component Name                                       | Location                                                                                               |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 1-2 Shift Solenoid<br>(1-2 SS) Valve (M30/M70)       | In the automatic transmission                                                                          |
| 2-3 Shift Solenoid<br>(2-3 SS) Valve (M30/M70)       | In the automatic transmission                                                                          |
| 3-2 Shift Solenoid<br>(3-2 SS) Valve (M30/M70)       | In the automatic transmission                                                                          |
| A/C Compressor Clutch<br>(C67/CJ2 +4.3L)             | Mounted to the front of the<br>A/C compressor                                                          |
| A/C Compressor Clutch<br>(C67/CJ2 -4.3L)             | Mounted to the front of the<br>A/C compressor                                                          |
| A/C Low Pressure Switch<br>(Gas +C67/CJ2)            | Right rear of the engine<br>compartment on the right side of<br>the A/C accumulator                    |
| A/C Low Pressure Switch<br>(Diesel +C67/CJ2)         | On the top right side of the A/C line                                                                  |
| A/C Refrigerant Pressure Sensor<br>(C67/CJ2 -Diesel) | In the right front of the engine com-<br>partment on the A/C high pressure<br>hose near the compressor |
| A/C Refrigerant Pressure Sensor<br>(C67/CJ2 +Diesel) | In the right front of the engine com-<br>partment on the A/C high pressure<br>hose near the compressor |
| A/T Shift Lock Control Solenoid                      | Under the I/P mounted to the right<br>side of the steering column                                      |
| Accelerator Pedal Position<br>(APP) Sensor           | On the driver floor board above the<br>accelerator pedal                                               |
| Air Temperature Actuator<br>- Left (CJ2)             | Bottom center of the HVAC<br>module assembly                                                           |
| Air Temperature Actuator<br>- Right (CJ2)            | Top middle of the HVAC<br>module assembly                                                              |
| Air Temperature Actuator<br>(C67/C42)                | Top middle of the HVAC<br>module assembly                                                              |

*(continued from column at left)*

| Component Name                                                                       | Location                                                                                                    |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Air Temperature Sensor<br>- Lower Left (CJ2)                                         | Left side of the HVAC module<br>near the mode actuator                                                      |
| Air Temperature Sensor<br>- Lower Right (CJ2)                                        | Lower left of the HVAC module<br>to the left of the air temperature<br>actuator - left                      |
| Air Temperature Sensor<br>- Upper Left (CJ2)                                         | At the top rear of the I/P below the<br>dash trim panel to the left of the<br>ambient light/sunload sensor  |
| Air Temperature Sensor<br>- Upper Right (CJ2)                                        | At the top rear of the I/P below the<br>dash trim panel to the right of the<br>ambient light/sunload sensor |
| Ambient Air Temperature Sensor<br>- HVAC (CJ2)                                       | Front of the vehicle mounted to<br>the front of the lower radiator core<br>support, on the right            |
| Ambient Air Temperature Sensor<br>(DF5)                                              | Attached to the left side of the ra-<br>diator core support behind the grille                               |
| Ambient Light Sensor<br>(C67/C42)                                                    | On the top center of the I/P<br>mounted in the trim panel                                                   |
| Ambient Light/Sunload Sensor<br>Assembly (CJ2)                                       | On the top center of the I/P<br>mounted in the trim panel                                                   |
| Audio Amplifier (UQA)                                                                | Mounted to floor under the rear of<br>the center console                                                    |
| Audio/Video Adapter (U42)                                                            | Rear of the center console near the<br>rear seat audio controller                                           |
| Automatic Transmission (MYC/MYD)                                                     | Under the Vehicle, mounted to the<br>rear of the engine                                                     |
| Automatic Transmission Fluid Pres-<br>sure Manual Valve Position Switch<br>(M30/M70) | In the automatic transmission                                                                               |
| Automatic Transmission Input Shaft<br>Speed (AT ISS) Sensor (MW7)                    | In the automatic transmission                                                                               |

*(continued on Pg. B-43)*

## Electrical Component Locations (cont'd)

(continued from Pg. B-42)

| Component Name                                           | Location                                                                      |
|----------------------------------------------------------|-------------------------------------------------------------------------------|
| Automatic Transmission Shift Lever (M30/M70/MYC/MYD/MW7) | Right side of the steering column to the rear of the steering wheel           |
| Automatic Transmission Turbine Speed Sensor (MW7)        | Mounted to the top left of the Transmission                                   |
| Auxiliary Battery Relay (TP2)                            | At the left side rear of the engine compartment                               |
| Auxiliary Body Control Module (XBCM) (Export)            | In the right side of the I/P, below the defrost deflector                     |
| Auxiliary Power Outlet - Bin (D07)                       | In the rear of the center console storage bin                                 |
| Auxiliary Power Outlet - Center Seat (AZ3)               | Between the Driver and Passenger Seats                                        |
| Auxiliary Power Outlet - Console (D07)                   | Rear of the center console below the rear seat audio controller               |
| Auxiliary Power Outlet - Front 1                         | Left center of the I/P to the left of the I/P multifunction switch assembly   |
| Auxiliary Power Outlet - Front 2                         | Right center of the I/P to the right of the I/P multifunction switch assembly |
| Back-up Alarm (8S3)                                      | On the rear of the vehicle frame                                              |
| Backup Lamp - Left Rear                                  | Left rear of the vehicle                                                      |
| Backup Lamp - Right Rear                                 | Right rear of the vehicle                                                     |
| Battery Current Sensor (10 Series)                       | Part of the negative battery cable assembly                                   |
| Battery - Left (Diesel 6A6/TP2)                          | Left front corner of engine compartment                                       |
| Battery - Right                                          | Right rear of the engine compartment to the rear of the coolant reservoir     |

(continued from column at left)

| Component Name                                   | Location                                                                                                |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Blower Motor                                     | Lower right side of the HVAC module below the passenger side of the I/P                                 |
| Blower Motor Control Module                      | Lower right side of the HVAC module below the passenger side of the I/P to the left of the blower motor |
| Body Control Module (BCM)                        | On the lower left side of the I/P to the left of the steering column                                    |
| Brake Booster Vacuum Sensor (JL4)                | Left rear of the engine compartment near the fuse block - underhood                                     |
| Brake Fluid Level Switch                         | Mounted to lower left side of the master cylinder                                                       |
| Brake Master Cylinder Pressure Sensor (JL1)      | Left rear of the engine compartment near the fuse block                                                 |
| Camper/Trailer Blunt Cut (UY2)                   | On the left frame rail, near the front of the bed                                                       |
| Camshaft Actuator Solenoid (6.0L/6.2L)           | Front of the engine, behind the water pump                                                              |
| Camshaft Position (CMP) Sensor                   | Front of the engine above the crank pulley                                                              |
| Cargo Lamp/Center High Mounted Stop Lamp (CHMSL) | Rear roof line above the rear window                                                                    |
| Cellular Microphone (UE1/U3U/UVB)                | In the overhead console                                                                                 |
| Central Sequential Fuel Injection (SFI) (4.3L)   | Top of the engine between the throttle body and distributor                                             |
| Chime Module (UL5)                               | Center of the I/P, behind the radio                                                                     |
| Clearance Lamp - Left Front (R05)                | Front of the left rear wheel flare                                                                      |
| Clearance Lamp - Left Rear (R05)                 | Rear of the left rear wheel flare                                                                       |
| Clearance Lamp - Right Front (R05)               | Front of the right rear wheel flare                                                                     |

(continued on Pg. B-44)

## Electrical Component Locations (cont'd)

(continued from Pg. B-43)

| Component Name                                        | Location                                                               |
|-------------------------------------------------------|------------------------------------------------------------------------|
| Clearance Lamp - Right Rear (R05)                     | Rear of the right rear wheel flare                                     |
| Clearance Lamps (U01)                                 | Center of the roof panel above the windshield                          |
| Cooling Fan - Left (Gas - LY6)                        | Left front of the engine compartment near the radiator                 |
| Cooling Fan - Right (Gas - LY6)                       | Right front of the engine compartment near the radiator                |
| Courtesy/Reading Lamps - Front                        | Mounted in the overhead console                                        |
| Courtesy/Reading Lamps - Rear (Extended Cab/Crew Cab) | In the headliner above the 2nd row seating                             |
| Crankshaft Position (CKP) Sensor (4.3L)               | In the front lower right of the timing cover                           |
| Crankshaft Position (CKP) Sensor (Gas -4.3L)          | On the right rear of the engine, behind the starter                    |
| Crankshaft Position (CKP) Sensor (Diesel)             | Front of the engine to the lower left of the crank pulley              |
| Data Link Connector (DLC)                             | Lower left side of instrument panel to the left of the steering column |
| Defogger Grid (C49)                                   | Mounted to the rear glass                                              |
| Digital Radio Receiver (U2K)                          | Right side of the I/P behind the I/P compartment                       |
| Door Latch Assembly - Driver                          | Inside the rear of the driver door below the outside door handle       |
| Door Latch Assembly - Left Rear (Crew Cab)            | Inside the rear of the left rear door near the outside door handle     |
| Door Latch Assembly - Passenger                       | Inside the rear of the passenger door below the outside door handle    |
| Door Latch Assembly - Right Rear (Crew Cab)           | Inside the rear of the right rear door near the outside door handle    |

(continued from column at left)

| Component Name                                                | Location                                                                             |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Door Lock Switch - Driver (AU3 -AN3/DL3)                      | Mounted to the driver door trim panel                                                |
| Door Lock Switch - Passenger (AU3 -AN3/DL3)                   | Mounted to the passenger door trim panel                                             |
| DPF Differential Pressure Sensor (Diesel)                     | In the middle of the frame rail cross member, above the catalytic converter          |
| Driver Door Switch (DDS) (AN3/DL3)                            | Mounted to the driver door trim panel                                                |
| Driver Information Center (DIC) Switch (UK3)                  | Center of the I/P between the instrument cluster and the air vents                   |
| Driver Shift Request Switch (MYC/MYD/MW7)                     | Part of the automatic transmission shift lever                                       |
| Electronic Adjustable Pedal Assembly (JF4)                    | Mounted under the lower left side of the instrument panel                            |
| Electronic Brake Control Module (EBCM)(JL4/JF3/JF7/JH6/JH7)   | Mounted to the left side of the frame assembly below the driver seat                 |
| Emergency Vehicle Roof Lamp Relay (5Y0)                       | Behind the overhead console                                                          |
| Emergency Vehicle Wiring Blunt Cuts (5Y0)                     | Behind the overhead console                                                          |
| Engine Control Module (ECM)                                   | Left front of the engine compartment near the fan shroud                             |
| Engine Coolant Level Switch (Diesel)                          | In the right front of the engine compartment, below the surge tank                   |
| Engine Coolant Temperature (ECT) Sensor (Gas +4.3L)           | In the left front of the cylinder head, between the #3 and #5 cylinder exhaust ports |
| Engine Coolant Temperature (ECT) Sensor (4.8L/5.3L/6.0L/6.2L) | Near the left front cylinder head, at the cylinder #1 exhaust port                   |

(continued on Pg. B-45)

## Electrical Component Locations (cont'd)

(continued from Pg. B-44)

| Component Name                                                                  | Location                                                                                         |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Engine Coolant Temperature (ECT) Sensor (Diesel)                                | Top front middle of the engine                                                                   |
| Engine Oil Level Switch (4.8L/5.3L/6.0L/6.2L)                                   | Mounted in the right side of the oil pan                                                         |
| Engine Oil Level Switch (Diesel)                                                | Mounted on the left side of the oil pan                                                          |
| Engine Oil Pressure (EOP) Sensor (Gas)                                          | Top rear of the engine to the rear of the intake manifold                                        |
| Engine Oil Pressure (EOP) Sensor (Diesel)                                       | On the left rear side of the engine block                                                        |
| Evaporative Emission (EVAP) Canister Purge Solenoid Valve (4.3L)                | Attached to the intake manifold on the right side of the engine to the rear of the ignition coil |
| Evaporative Emission (EVAP) Canister Purge Solenoid Valve (4.8L/5.3L/6.0L/6.2L) | Top of the engine mounted to the intake manifold, on the left side of Injector #1                |
| Evaporative Emission (EVAP) Canister Vent Solenoid Valve (Gas)                  | Lower right rear of the vehicle, on the Evaporative Emission Canister                            |
| Exhaust Gas Recirculation (EGR) Valve (Diesel)                                  | Top right front of the engine                                                                    |
| Exhaust Gas Temperature (EGT) Sensor 1 (Diesel)                                 | Under the left side of the vehicle, in front of the catalytic converter                          |
| Exhaust Gas Recirculation (EGR) Temperature Sensor 1 (Diesel)                   | --                                                                                               |
| Exhaust Gas Recirculation (EGR) Temperature Sensor 2 (Diesel)                   | --                                                                                               |
| Exhaust Gas Temperature (EGT) Sensor 2 (Diesel)                                 | Under the left side of the vehicle, behind the catalytic converter                               |
| Exterior Illumination Lamp - Left (DL3/DR4/DPN)                                 | Under the left outside rearview mirror                                                           |

(continued from column at left)

| Component Name                                   | Location                                                        |
|--------------------------------------------------|-----------------------------------------------------------------|
| Exterior Illumination Lamp - Right (DL3/DR4/DPN) | Under the right outside rearview mirror                         |
| Fog Lamp - Left Front (T96)                      | Lower left front of the vehicle                                 |
| Fog Lamp - Right Front (T96)                     | Lower right front of the vehicle                                |
| Front Axle Actuator (NQF/NQG/NQH/NP2)            | Mounted to the front axle assembly                              |
| Fuel Heater (Diesel)                             | Near the top of the fuel filter on the right side of the engine |
| Fuel Injector 1 (Diesel)                         | Near the right side engine rocker cover above cylinder #1       |
| Fuel Injector 1 (Gas)                            | Upper left side of the engine, at cylinder #1                   |
| Fuel Injector 2 (Diesel)                         | Near the left side engine rocker cover above cylinder #2        |
| Fuel Injector 2 (Gas)                            | Upper right side of the engine, at cylinder #2                  |
| Fuel Injector 3 (Diesel)                         | Near the right side engine rocker cover above cylinder #3       |
| Fuel Injector 3 (Gas)                            | Upper left side of the engine, at cylinder #3                   |
| Fuel Injector 4 (Diesel)                         | Near the left side engine rocker cover above cylinder #4        |
| Fuel Injector 4 (Gas)                            | Upper right side of the engine, at cylinder #4                  |
| Fuel Injector 5 (Diesel)                         | Near the right side engine rocker cover above cylinder #5       |
| Fuel Injector 5 (Gas)                            | Upper left side of the engine, at cylinder #5                   |
| Fuel Injector 6 (Diesel)                         | Near the left side engine rocker cover above cylinder #6        |

(continued on Pg. B-46)

## Electrical Component Locations (cont'd)

(continued from Pg. B-45)

| Component Name                                        | Location                                                          |
|-------------------------------------------------------|-------------------------------------------------------------------|
| Fuel Injector 6 (Gas)                                 | Upper right side of the engine, at cylinder #6                    |
| Fuel Injector 7 (Diesel)                              | Near the right side engine rocker cover above cylinder #7         |
| Fuel Injector 7 (Gas)<br>(4.8L/5.3L/6.0L/6.2L)        | Upper left side of the engine, at cylinder #7                     |
| Fuel Injector 8 (Diesel)                              | Near the left side engine rocker cover above cylinder #8          |
| Fuel Injector 8 (Gas)<br>(4.8L/5.3L/6.0L/6.2L)        | Upper right side of the engine, at cylinder #8                    |
| Fuel Level Sensor - Primary (Diesel)                  | Inside the primary fuel tank, under the vehicle                   |
| Fuel Level Sensor - Secondary<br>(Diesel - NQZ)       | Inside the primary fuel tank, under the rear of the vehicle       |
| Fuel Line Pressure Sensor<br>(Gas - 4.3L/LMG/LY6/LC9) | In front of the Electronic Brake Control Module                   |
| Fuel Pressure Regulator (Diesel)                      | Mounted to the injection pump at the front of the engine center   |
| Fuel Pump (Diesel)                                    | On the left rear inner frame rail, in front of the rear fuel tank |
| Fuel Pump and Sender Assembly - Front (Gas)           | Inside the fuel tank under the vehicle                            |
| Fuel Pump and Sender Assembly - Rear (Gas +LY6)       | Inside the secondary fuel tank under the rear of the vehicle      |
| Fuel Pump (FP) Relay - Secondary<br>(Gas +LY6)        | On the fuse block - underhood bracket                             |
| Fuel Rail Pressure (FRP) Sensor<br>(Diesel)           | Top of the engine mounted to the right fuel rail                  |
| Fuel Rail Temperature (FRT) Sensor<br>(Diesel)        | On the top left middle of the engine                              |

(continued from column at left)

| Component Name                                         | Location                                                   |
|--------------------------------------------------------|------------------------------------------------------------|
| Fuel System Control Module<br>(Gas - 4.3L/LMG/LY6/LC9) | Mounted to the rear frame, near the spare tire mount       |
| Fuel Tank Pressure (FTP) Sensor (Gas)                  | Mounted to the fuel pump and sender assembly               |
| Fuse Block - I/P                                       | Left of the I/P behind the side trim panel                 |
| Fuse Block - Mobile Radio (9L4)                        | Right side of the I/P behind the I/P compartment           |
| Fuse Block - Underhood                                 | Left side of the engine compartment                        |
| Fuse Holder - Underhood                                | Right rear of engine compartment mounted to the bulk head  |
| Garage Door Opener (UGI)                               | Front of the passenger compartment in the overhead console |
| Generator (4.3L)                                       | Right front top of the engine                              |
| Generator (Gas -4.3L)                                  | Upper left front corner of the engine                      |
| Generator - Left (Diesel +K76)                         | Upper left front corner of the engine                      |
| Generator - Right (Diesel)                             | Upper right front corner of the engine                     |
| Glow Plug 1 (Diesel)                                   | Near the right side engine rocker cover above cylinder #1  |
| Glow Plug 2 (Diesel)                                   | Near the left side engine rocker cover above cylinder #2   |
| Glow Plug 3 (Diesel)                                   | Near the right side engine rocker cover above cylinder #3  |
| Glow Plug 4 (Diesel)                                   | Near the left side engine rocker cover above cylinder #4   |
| Glow Plug 5 (Diesel)                                   | Near the right side engine rocker cover above cylinder #5  |
| Glow Plug 6 (Diesel)                                   | Near the left side engine rocker cover above cylinder #6   |

(continued on Pg. B-47)

## Electrical Component Locations (cont'd)

(continued from Pg. B-46)

| Component Name                                    | Location                                                                               |
|---------------------------------------------------|----------------------------------------------------------------------------------------|
| Glow Plug 7 (Diesel)                              | Near the right side engine rocker cover above cylinder #7                              |
| Glow Plug 8 (Diesel)                              | Near the left side engine rocker cover above cylinder #8                               |
| Glow Plug Control Module (GPCM) (Diesel)          | Left rear of the engine above the rocker cover to the left of the turbocharger         |
| Headlamp - High Beam - Left                       | Left front of the vehicle                                                              |
| Headlamp - High Beam - Right                      | Right front of the vehicle                                                             |
| Headlamp - Low Beam - Left                        | Left front of the vehicle                                                              |
| Headlamp - Low Beam - Right                       | Right front of the vehicle                                                             |
| Headlamp and Panel Dimmer Switch                  | Left side of the I/P to the left side of the steering column                           |
| Heated Exygen Sensor (H02S) Bank 1 Sensor 1 (Gas) | Under the vehicle to the left side of the engine, in front of the catalytic converter  |
| Heated Exygen Sensor (H02S) Bank 1 Sensor 2 (Gas) | Under the vehicle to the left side of the engine, behind the catalytic converter       |
| Heated Exygen Sensor (H02S) Bank 2 Sensor 1 (Gas) | Under the vehicle to the right side of the engine, in front of the catalytic converter |
| Heated Exygen Sensor (H02S) Bank 2 Sensor 2 (Gas) | Under the vehicle to the right side of the engine, behind the catalytic converter      |
| Heated Seat Element - Driver Back (AN3)           | Under the driver seat back upholstery                                                  |
| Heated Seat Element - Driver Cushion (AN3)        | Under the driver seat cushion upholstery                                               |
| Heated Seat Element - Passenger Back (AN3)        | Under the passenger seat back upholstery                                               |

(continued from column at left)

| Component Name                                      | Location                                                                                             |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Heated Seat Element - Passenger Cushion (AN3)       | Under the passenger seat cushion upholstery                                                          |
| Heated Seat Switch - Passenger (AN3)                | Passenger door panel above the passenger door switch assembly                                        |
| Heated Steering Wheel (KA9)                         | On the steering wheel                                                                                |
| Heated Steering Wheel Control Module (KA9)          | Lower left side of the steering wheel assembly behind the inflatable restraint steering wheel module |
| Hood Ajar Switch (AP3/AP8)                          | Part of the hood latch assembly                                                                      |
| Horn - Left                                         | Lower left front of the vehicle                                                                      |
| Horn - Right (7Z1/YE9)                              | Lower right front of the vehicle                                                                     |
| Horn Switch                                         | In the steering wheel behind the inflatable restraint steering wheel module                          |
| HVAC Control Module                                 | Center of the I/P below the radio                                                                    |
| I/P Multifunction Switch Assembly (JL4/JF4/UD7/XA7) | Center of the I/P below the HVAC controls                                                            |
| Ignition Coil 1 (4.8L/5.3L/6.0L/6.3L)               | Upper left side of the engine, at cylinder #1                                                        |
| Ignition Coil 2 (4.8L/5.3L/6.0L/6.3L)               | Upper right side of the engine, at cylinder #2                                                       |
| Ignition Coil 3 (4.8L/5.3L/6.0L/6.3L)               | Upper left side of the engine, at cylinder #3                                                        |
| Ignition Coil 4 (4.8L/5.3L/6.0L/6.3L)               | Upper right side of the engine, at cylinder #4                                                       |
| Ignition Coil 5 (4.8L/5.3L/6.0L/6.3L)               | Upper left side of the engine, at cylinder #5                                                        |
| Ignition Coil 6 (4.8L/5.3L/6.0L/6.3L)               | Upper right side of the engine, at cylinder #6                                                       |

(continued on Pg. B-48)

## Electrical Component Locations (cont'd)

(continued from Pg. B-47)

| Component Name                                                         | Location                                                                              |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Ignition Coil 7<br>(4.8L/5.3L/6.0L/6.3L)                               | Upper left side of the engine,<br>at cylinder #7                                      |
| Ignition Coil 8<br>(4.8L/5.3L/6.0L/6.3L)                               | Upper right side of the engine,<br>at cylinder #8                                     |
| Ignition Control Module (ICM) (4.3L)                                   | Mounted to the right front of<br>the intake manifold in front of<br>the ignition coil |
| Ignition Switch                                                        | In the upper steering column on<br>the ignition key cylinder housing                  |
| Inclination Sensor (SPO Alarm)                                         | Behind the left I/P knee bolster on<br>the floor heater duct                          |
| Inflatable Restraint Front Sensor<br>- Left (10 Series)                | Left front of the engine compartment<br>on the lower radiator core support            |
| Inflatable Restraint Front Sensor<br>- Right (10 Series)               | Right front of the engine compartment<br>on the lower radiator core support           |
| Inflatable Restraint Front Sensor<br>(-10 Series)                      | Under the center of the<br>radiator core support                                      |
| Inflatable Restraint I/P Module                                        | Right side of the I/P directly in front<br>of the passenger seat                      |
| Inflatable Restraint I/P Module<br>Disable Switch                      | In the I/P to the right of the radio                                                  |
| Inflatable Restraint Passenger Air<br>Bag ON/OFF Indicator (AL0/C99)   | Front of the passenger compartment<br>in the overhead console                         |
| Inflatable Restraint Passenger Pres-<br>ence System (PPS) Module (AL0) | Under the front passenger seat                                                        |
| Inflatable Restraint Passenger Seat<br>Belt Tension Sensor (AL0)       | Part of the passenger seat belt<br>buckle                                             |
| Inflatable Restraint Roof Rail<br>Module - Left (ASF)                  | Behind the left side of the headliner<br>trim to the rear of the C-pillar             |
| Inflatable Restraint Roof Rail<br>Module - Right (ASF)                 | Behind the right side of the head-<br>liner trim to the rear of the C-pillar          |

(continued from column at left)

| Component Name                                                                                 | Location                                                         |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Inflatable Restraint Seat Position<br>Sensor (SPS) - Left (10 Series)                          | Right front corner of the driver seat<br>track assembly          |
| Inflatable Restraint Sensing and<br>Diagnostic Module (SDM)                                    | Under the driver seat                                            |
| Inflatable Restraint Side Impact<br>Sensor (SIS) - Left Front (ASF)                            | Inside the driver door                                           |
| Inflatable Restraint Side Impact<br>Sensor (SIS) - Left Rear (ASF +<br>Crew Cab/Extended Cab)  | Inside the left rear door                                        |
| Inflatable Restraint Side Impact<br>Sensor (SIS) - Right Front (ASF)                           | Inside the passenger door                                        |
| Inflatable Restraint Side Impact<br>Sensor (SIS) - Right Rear (ASF +<br>Crew Cab/Extended Cab) | Inside the right rear door                                       |
| Inflatable Restraint Steering Wheel<br>Module                                                  | On the steering wheel                                            |
| Inflatable Restraint Steering Wheel<br>Module Coil                                             | In the steering column behind the<br>steering wheel              |
| Inflatable Restraint Vehicle Rollover<br>Sensor (ASF)                                          | Below the center console                                         |
| Information Center Telltale Assembly<br>(UD7)                                                  | Top rear of the passenger compart-<br>ment above the rear window |
| Infrared Module (U42)                                                                          | In the roof mounted DVD system                                   |
| Input Speed Sensor (ISS)<br>(M30/M70/MYC/MYD)                                                  | In the automatic transmission                                    |
| Inside Air Temperature Sensor<br>- Front (CJ2)                                                 | Left side of the headliner between<br>A-pillar and B-pillar      |
| Inside Rearview Mirror (ISRVM)                                                                 | Mounted at the top center of the<br>windshield                   |

(continued on Pg. B-49)

## Electrical Component Locations (cont'd)

(continued from Pg. B-48)

| Component Name                                 | Location                                                               |
|------------------------------------------------|------------------------------------------------------------------------|
| Instrument Panel Cluster                       | Left side of the I/P above the steering column                         |
| Intake Air Heater (1AH) Module (Diesel)        | Mounted at the front of the engine center                              |
| Intake Air Temperature (IAT) Sensor 2 (Diesel) | On the top front middle of the engine                                  |
| Intake Air Valve (Diesel)                      | On the top right front of the engine                                   |
| Internal Mode Switch (MYC/MYD)                 | In the automatic transmission                                          |
| Junction Block - Left I/P                      | Lower left side of instrument panel to the left of the steering column |
| Junction Block - Rear Lamps                    | Inside of the left frame rail near the rear of the vehicle             |
| Junction Block - Right I/P                     | Right side of the I/P behind the end trim panel                        |
| Knock Sensor (KS) - 1 (Gas)                    | Lower left side of engine                                              |
| Knock Sensor (KS) - 2 (Gas)                    | Lower right side of engine                                             |
| License Lamp - Left                            | Left center of the rear bumper                                         |
| License Lamp - Right                           | Right center of the rear bumper                                        |
| Line Pressure Control (PC) Solenoid (MYC/MYD)  | Part of the automatic transmission                                     |
| Manifold Absolute Pressure (MAP) Sensor        | Top of the engine above intake manifold                                |
| Marker Lamp - Left Front (Z88)                 | Left front of the vehicle                                              |
| Marker Lamp - Left Rear (Z88)                  | Part of the left rear tail lamp assembly                               |
| Marker Lamp - Right Front (Z88)                | Right front of the vehicle                                             |
| Marker Lamp - Right Rear (Z88)                 | Part of the right rear tail lamp assembly                              |
| Marker Lamp - Tailgate (R05)                   | Below the tailgate directly above the license plate                    |

(continued from column at left)

| Component Name                                                   | Location                                                       |
|------------------------------------------------------------------|----------------------------------------------------------------|
| Mass Air Flow (MAF)/Intake Air Temperature (IAT) Sensor (Gas)    | Right front of the engine compartment, in the air cleaner duct |
| Mass Air Flow (MAF)/Intake Air Temperature (IAT) Sensor (Diesel) | Right front of the engine compartment, in the air cleaner duct |
| Memory Seat Module (AN3)                                         | Under the front of the driver seat above the seat track        |
| Memory/Heated Seat Switch (AN3)                                  | Driver door panel above the driver door switch assembly        |
| Mod Main Pressure Control Solenoid (MW7)                         | In the automatic transmission                                  |
| Mode Actuator                                                    | Left side of the HVAC module assembly                          |
| Mobile Radio Blunt Cut (9L4)                                     | Below the center of the I/P                                    |
| Noise Compensation Microphone (Y91)                              | Inside the center console                                      |
| Object Sensor - Left Rear Corner (UD7)                           | Left rear corner of the bumper cover                           |
| Object Sensor - Left Rear Middle (UD7)                           | Left side of the bumper cover                                  |
| Object Sensor - Right Rear Corner (UD7)                          | Right rear corner of the bumper cover                          |
| Object Sensor - Right Rear Middle (UD7)                          | Right side of the bumper cover                                 |
| Output Speed Sensor (OSS) (MYC/MYD)                              | In the automatic transmission                                  |
| Outside Moisture Sensor (CE1)                                    | Mounted to the windshield near the inside rearview mirror      |
| Outside Rearview Mirror - Driver (-DL3)                          | On the left front door                                         |
| Outside Rearview Mirror - Driver (+DL3)                          | On the left front door                                         |

(continued on Pg. B-50)

## Electrical Component Locations (cont'd)

(continued from Pg. B-49)

| Component Name                                 | Location                                                            |
|------------------------------------------------|---------------------------------------------------------------------|
| Outside Rearview Mirror - Passenger (-DL3)     | On the right front door                                             |
| Outside Rearview Mirror - Passenger (+DL3)     | On the right front door                                             |
| Outside Rearview Mirror Switch (-DL3)          | In the left front door trim panel                                   |
| Park Brake Switch                              | Under the driver side I/P mounted to the park brake pedal assembly  |
| Park/Neutral Position (PNP) Switch (M30/M70)   | Mounted to the left front of the transmission, at the shift shaft   |
| Park/Turn Signal Lamp - Left Front Lower       | Left front of the vehicle                                           |
| Park/Turn Signal Lamp - Left Front Upper       | Left front of the vehicle                                           |
| Park/Turn Signal Lamp - Right Front Lower      | Right front of the vehicle                                          |
| Park/Turn Signal Lamp - Right Front Upper      | Right front of the vehicle                                          |
| Passenger Door Switch (PDS) (AN3/DL3)          | Mounted to the passenger door trim panel                            |
| Power Brake Booster (JL4)                      | Left rear corner of the engine compartment near the master cylinder |
| Power Take Off Blunt Cut (PTO)                 | --                                                                  |
| Power Take off (PTO) Module (PTO)              | On the right side outer frame rail, near the right front tire       |
| Power Take off (PTO) Relay (PTO)               | In the engine compartment                                           |
| Power Take off (PTO) Switch (PTO)              | Center of the I/P to the right of the radio                         |
| Pressure Control (PC) Solenoid Valve (M30/M70) | In the automatic transmission                                       |

(continued from column at left)

| Component Name                                      | Location                                                    |
|-----------------------------------------------------|-------------------------------------------------------------|
| Pressure Control Solenoid 1 (PCS1) (MW7)            | In the automatic transmission                               |
| Pressure Control Solenoid 2 (PCS2) (MW7)            | In the automatic transmission                               |
| Pressure Control (PC) Solenoid 2 (MYC/MYD)          | Part of the automatic transmission                          |
| Pressure Control (PC) Solenoid 3 (MYC/MYD)          | Part of the automatic transmission                          |
| Pressure Control (PC) Solenoid 4 (MYC/MYD)          | Part of the automatic transmission                          |
| Pressure Control (PC) Solenoid 5 (MYC/MYD)          | Part of the automatic transmission                          |
| Pressure Switch Manifold (PSM) (MW7)                | In the automatic transmission                               |
| Radio                                               | Center of the I/P                                           |
| Rear Object Control Module (UD7)                    | Under the right front seat                                  |
| Rear Seat Audio (RSA) Controller (UK6)              | Rear of the center console                                  |
| Recirculation Actuator (CJ2/C67)                    | Top of the HVAC module on the right side                    |
| Remote Control Door Lock Receiver (RCDLR) (AP3/AP8) | Top rear of the passenger compartment above the rear window |
| Roof Beacon Switch (5X7/5Y0/TRW)                    | In the overhead console                                     |
| Roof Beacon Relay (TRW)                             | Behind the overhead console, near the top                   |
| Roof Marker Lamp - Left (U01)                       | On the left side of the roof, above the windshield          |
| Roof Marker Lamp - Right (U01)                      | On the right side of the roof, above the windshield         |

(continued on Pg. B-51)

## Electrical Component Locations (cont'd)

(continued from Pg. B-50)

| Component Name                                  | Location                                                                    |
|-------------------------------------------------|-----------------------------------------------------------------------------|
| Roof Mounted Beacon Blunt Cuts (TRW)            | Behind the overhead console, on the right                                   |
| Rotational Position Sensor (NQH)                | Mounted to the transfer case                                                |
| Run Relay (TP2)                                 | At the right rear of the engine compartment, near the underhood fuse holder |
| Seat Adjuster Assembly - Driver (AG1)           | Below the driver seat mounted to the seat track                             |
| Seat Adjuster Assembly - Passenger (AG2)        | Below the passenger seat mounted to the seat track                          |
| Seat Adjuster Switch - Driver (AG1)             | Lower left side of the driver seat                                          |
| Seat Adjuster Switch - Passenger (AG2)          | Lower right side of the passenger seat                                      |
| Seat Belt Buckle - Driver                       | Right rear corner of the driver seat cushion frame                          |
| Seat Belt Buckle - Passenger (10 Series)        | Left rear corner of the passenger seat cushion frame                        |
| Seat Belt Pretensioner - Driver                 | Part of the driver seat belt retractor assembly                             |
| Seat Belt Pretensioner - Passenger              | Part of the passenger seat belt retractor assembly                          |
| Seat Front Vertical Motor - Driver (AG1)        | Part of the seat adjuster assembly - driver                                 |
| Seat Front Vertical Motor - Passenger (AG2)     | Part of the seat adjuster assembly - passenger                              |
| Seat Front Vertical Motor Position Sensor (AN3) | Under the driver seat, toward the middle                                    |
| Seat Horizontal Motor - Driver (AG1)            | Part of the seat adjuster assembly - driver                                 |

(continued from column at left)

| Component Name                                             | Location                                                                    |
|------------------------------------------------------------|-----------------------------------------------------------------------------|
| Seat Horizontal Motor - Passenger (AG2)                    | Part of the seat adjuster assembly - passenger                              |
| Seat Horizontal Motor Position Sensor - Driver (AN3)       | Under the driver seat, toward the front                                     |
| Seat Lumbar Horizontal Motor - Driver (AN3)                | In the driver seat back, on the left                                        |
| Seat Lumbar Horizontal Motor - Passenger (AN3)             | In the passenger seat back, on the right                                    |
| Seat Lumbar Horizontal Motor Position Sensor- Driver (AN3) | In the driver seat back, on the left                                        |
| Seat Lumbar Switch - Driver (AN3)                          | Lower left side of the driver seat                                          |
| Seat Lumbar Switch - Passenger (AN3)                       | Lower right side of the passenger seat                                      |
| Seat Lumbar Vertical Motor - Driver (AN3)                  | In the driver seat back, on the right                                       |
| Seat Lumbar Vertical Motor - Passenger (AN3)               | In the passenger seat back, on the left                                     |
| Seat Lumbar Vertical Motor Position Sensor- Driver (AN3)   | In the driver seat back, on the right                                       |
| Seat Rear Vertical Motor - Driver (AG1)                    | Part of the seat adjuster assembly - driver                                 |
| Seat Rear Vertical Motor - Driver (AG2)                    | Part of the seat adjuster assembly - passenger                              |
| Seat Recline Motor - Driver (AN3)                          | Lower right side of the driver seat back, below the seat back upholstery    |
| Seat Recline Motor - Passenger (AN3)                       | Lower right side of the passenger seat back, below the seat back upholstery |
| Seat Recline Position Sensor - Driver (AN3)                | Lower right side of the driver seat back, below the seat back upholstery    |

(continued on Pg. B-52)

## Electrical Component Locations (cont'd)

(continued from Pg. B-51)

| Component Name                                    | Location                                                 |
|---------------------------------------------------|----------------------------------------------------------|
| Security Indicator Lamp (SPO Alarm)               | --                                                       |
| Shift Solenoid 1 (SS1) (MW7)                      | In the automatic transmission                            |
| Shift Solenoid 2 (SS2) (MW7)                      | In the automatic transmission                            |
| Shift Solenoid 3 (SS3) (MW7)                      | In the automatic transmission                            |
| Shift Solenoid (SS) 1 (MYC/MYD)                   | Part of the automatic transmission                       |
| Shift Solenoid (SS) 2 (MYC/MYD)                   | Part of the automatic transmission                       |
| Shock Sensor (SPO Alarm)                          | Under the left side of the I/P                           |
| Sliding Rear Window Close Relay (A48)             | On the right rear of the cab wall, behind the trim panel |
| Sliding Rear Window Motor (A48)                   | Below the rear window                                    |
| Sliding Rear Window Open Relay (A48)              | On the right rear of the cab wall, behind the trim panel |
| Sliding Rear Window Switch (A48)                  | In the overhead console                                  |
| Speaker - Center (UQA +Y91)                       | In the center of the upper I/P pad                       |
| Speaker - Left Front                              | Behind the left front door trim panel                    |
| Speaker - Left Front Tweeter (UQ3/UQA)            | Behind the left A-pillar trim panel                      |
| Speaker - Left Rear (Regular Cab)                 | Behind the left B-pillar trim panel                      |
| Speaker - Left Rear Door (Extended Cab/Crew Cab)  | Behind the left rear door trim panel                     |
| Speaker - Right Front                             | Behind the passenger door trim panel                     |
| Speaker - Right Front Tweeter (UQ3/UQA)           | Behind the right A-pillar trim panel                     |
| Speaker - Right Rear (Regular Cab)                | Behind the right B-pillar trim panel                     |
| Speaker - Right Rear Door (Extended Cab/Crew Cab) | Behind the right rear door trim panel                    |
| Starter                                           | Lower right corner of the engine                         |

(continued from column at left)

| Component Name                                          | Location                                                                                            |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Steering Angle Sensor (JL4)                             | Mounted to the steering column below the shift interlock solenoid                                   |
| Steering Wheel Control Switch Assembly - Left (K34/KA9) | Left center of the steering wheel to the left of the inflatable restraint steering wheel module     |
| Steering Wheel Control Switch Assembly - Right (UK3)    | Right center of the steering wheel to the right of the inflatable restraint steering wheel module   |
| Stop Lamp Switch                                        | Top of the brake pedal assembly                                                                     |
| Sunroof Module (CF5)                                    | Front of the passenger compartment above the headliner                                              |
| Sunroof Switch (CF5)                                    | Front of the passenger compartment in the overhead console                                          |
| Sunshade - Left (DH6)                                   | Front left roof line mounted to the headliner                                                       |
| Sunshade - Right (DH6)                                  | Front right roof line mounted to the headliner                                                      |
| Tail/Stop and Turn Signal Lamp - Lower Left             | Left rear of the vehicle                                                                            |
| Tail/Stop and Turn Signal Lamp - Lower Right            | Right rear of the vehicle                                                                           |
| Tail/Stop and Turn Signal Lamp - Upper Left             | Left rear of the vehicle                                                                            |
| Tail/Stop and Turn Signal Lamp - Upper Right            | Right rear of the vehicle                                                                           |
| Terminator Resister                                     | In the chassis harness on the left rear chassis crossmember near the evaporative emissions canister |
| Theft Deterrent Control Module                          | Right side of the steering column near the ignition key cylinder                                    |

(continued on Pg. B-53)

## Electrical Component Locations (cont'd)

(continued from Pg. B-52)

| Component Name                                                                    | Location                                                                        |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Throttle Body (Gas)                                                               | Mounted to the front of the intake manifold                                     |
| Torque Converter Clutch (TCC) Solenoid Valve (M30/M70)                            | In the automatic transmission                                                   |
| Torque Converter Clutch Pressure Control Solenoid (TCC PCS) (MW7)                 | In the automatic transmission                                                   |
| Torque Converter Clutch Pulse Width Modulation (TCC PWM) Solenoid Valve (M30/M70) | In the automatic transmission                                                   |
| Torque Converter Clutch (TCC) Pressure Control (PC) Solenoid (MYC/MYD)            | Part of the automatic transmission                                              |
| Tow/Haul Switch (M30/M70/MYC/MYD/MW7)                                             | Part of the automatic transmission shift lever                                  |
| Traction Control Switch (JL4)                                                     | Center of the I/P near the radio, part of the I/P multifunction switch assembly |
| Trailer Blunt Cut (Export)                                                        | --                                                                              |
| Trailer Brake Blunt Cut (Domestic)                                                | Under the left side of the I/P, taped to the BCM wiring                         |
| Trailer Brake Control Panel Switch (JL1)                                          | Lower left side of the I/P                                                      |
| Trailer Brake Controller Module (TBCM) (JL1 +20/30 Series)                        | On the left side inner frame rail, near the rear of the vehicle                 |
| Trailer Brake Controller Module (TBCM) (JL1 +31 Series)                           | On the right side inner frame rail, near the rear of the vehicle                |
| Trailer Brake Controller Solid State Relay (JL1 +20/30 Series)                    | On the left side inner frame rail, near the rear of the vehicle                 |
| Trailer Brake Controller Solid State Relay (JL1 +31 Series)                       | On the right side inner frame rail, near the rear of the vehicle                |

(continued from column at left)

| Component Name                                             | Location                                                                  |
|------------------------------------------------------------|---------------------------------------------------------------------------|
| Trailer Connector (UY7)                                    | Rear of the vehicle, to the left of the license plate                     |
| Transfer Case Encoder Motor (NQF/NQH)                      | Mounted to the transfer case                                              |
| Transfer Case Shift Control Module (NQF/NQH)               | Lower left side of the I/P near the steering column                       |
| Transfer Case Shift Control Switch (NQF/NQH -YE9)          | Center of the I/P, to the left of the radio                               |
| Transfer Case Shift Control Switch (NQF/NQH +YE9)          | Left side of the I/P, to the left of the steering wheel                   |
| Transfer Case Shift Control Switch (NQG/NP2)               | On top of the transfer case                                               |
| Transmission Control Module (TCM) (M30/M70/MW7)            | Left front of the engine compartment near the fan shroud                  |
| Transmission Control Module (TCM) (MYC/MYD)                | Part of the automatic transmission                                        |
| Transmission Fluid Pressure (TFP) Switch (MYC/MYD)         | Part of the automatic transmission                                        |
| Transmission Fluid Temperature (TFT) Sensor (MYC/MYD)      | Part of the automatic transmission                                        |
| Transmission Internal Mode Switch (MW7)                    | In the automatic transmission                                             |
| Turbocharger Vane Position Control Solenoid Valve (Diesel) | On the top center of the engine                                           |
| Turbocharger Vane Position Sensor (Diesel)                 | On the top left front of the engine                                       |
| Turn Signal Malfunction Switch                             | Mounted to the left side of the steering column behind the steering wheel |

(continued on Pg. B-54)

## Electrical Component Locations (cont'd)

(continued from Pg. B-53)

| Component Name                                               | Location                                                                                   |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Valve Lifter Oil Manifold (VLOM) Assembly (5.3L/6.0L/6.2L)   | Mounted in the valve lifter valley below the intake manifold                               |
| Vehicle Communication Interface Module (VCIM) (UE1 +YE9)     | Center of the I/P, behind the HVAC control head                                            |
| Vehicle Communication Interface Module (VCIM) (UE1 -YE9)     | Center of the I/P, below the lower center I/P Panel                                        |
| Vehicle Speed Sensor (VSS) (M30/M70/MYD/MW7)                 | In the tailshaft housing of the transmission                                               |
| Video Display (U42)                                          | In the headliner between the front and second row seating                                  |
| Washer Fluid Level Switch                                    | Mounted in bottom of the washer fluid reservoir                                            |
| Water In Fuel Sensor (Diesel)                                | Bottom of the fuel filter on the right side of the engine                                  |
| Wheel Speed Sensor (WSS) - Left Front (JL4/JF3/JF7/JH6/JH7)  | Mounted to the left front steering knuckle assembly                                        |
| Wheel Speed Sensor (WSS) - Left Rear (JL4)                   | Mounted to the left rear brake backing plate                                               |
| Wheel Speed Sensor (WSS) - Right Front (JL4/JF3/JF7/JH6/JH7) | Mounted to the right front steering knuckle assembly                                       |
| Wheel Speed Sensor (WSS) - Right Rear (JL4)                  | Mounted to the left rear brake backing plate                                               |
| Window Motor - Driver (A31)                                  | Inside the driver door mounted to the window regulator, to the rear of the door speaker    |
| Window Motor - Left Rear (Crew Cab +31/Extended Cab +ABV)    | Inside the left rear door mounted to the window regulator, above the door speaker          |
| Window Motor - Passenger (A31)                               | Inside the passenger door mounted to the window regulator, to the rear of the door speaker |

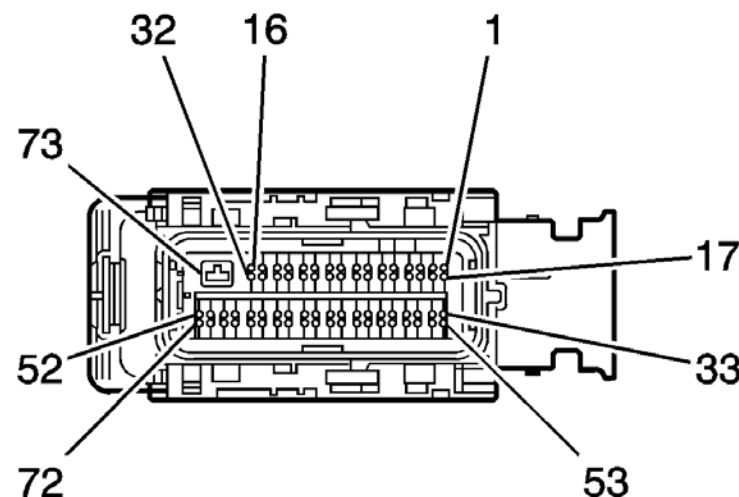
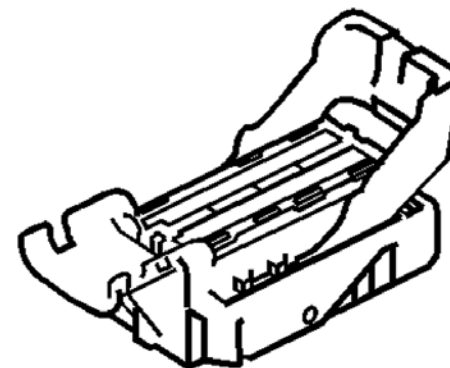
(continued from column at left)

| Component Name                                              | Location                                                                                                   |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Window Motor - Right Rear (Crew Cab +31/Extended Cab +ABV)  | In the right rear door mounted to the window regulator                                                     |
| Window Switch - Driver (A31 -AN3/DL3)                       | In the left front door trim panel                                                                          |
| Window Switch - Left Rear (Crew Cab +31/Extended Cab +ABV)  | In the left rear door trim panel                                                                           |
| Window Switch - Passenger (A31 -AN3/DL3)                    | In the right front door trim panel                                                                         |
| Window Switch - Right Rear (Crew Cab +31/Extended Cab +ABV) | In the right rear door trim panel                                                                          |
| Windshield Washer Fluid Pump                                | Left front corner of the engine compartment mounted in the bottom of the windshield washer fluid reservoir |
| Windshield Washer Solvent Heater (XA7)                      | Left rear corner of the engine compartment                                                                 |
| Windshield Wiper Motor                                      | Under the windshield cowl between the wiper arms                                                           |
| Wrecker Relay (5X7)                                         | In the right rear corner of the engine compartment, above the right front wheel house                      |
| Yaw Rate and Lateral Acceleration Sensor (JL4)              | Under the center console trim panel                                                                        |

## Engine Control Module (ECM): LU3 – 4.3L Gas – Connector X-1

OEM: 15499466  
 Service: 88988931  
 Description: 73-Way F Receptacle 0.64 2.8 Sealed (BK)

| Pin   | Wire Color   | Circuit No. | Function                                |
|-------|--------------|-------------|-----------------------------------------|
| 1     | 0.35 D-BU    | 1161        | APP Sensor 1 Signal                     |
| 2     | 0.5 PU       | 1670        | HO2S High Signal Bank 2 Sensor 2        |
| 3     | 0.5 D-BU     | 5985        | Accessory Wakeup Serial Data            |
| 4     | --           | --          | Not Used                                |
| 5     | 0.35 D-GN    | 335         | Low Speed Cooling Fan Relay Control     |
| 6     | 0.35 D-GN/WH | 465         | Fuel Pump Relay Control-Primary         |
| 7     | --           | --          | Not Used                                |
| 8     | 0.35 TN      | 5514        | Low Reference (CJ2/C67)                 |
| 9     | 0.5 TN/WH    | 1669        | HO2S Low Signal Bank 1 Sensor 2         |
| 10    | 0.5 TN       | 1671        | HO2S Low Signal Bank 2 Sensor 2         |
| 11-12 | --           | --          | Not Used                                |
| 13    | 0.35 YE      | 5991        | Powertrain Relay Coil Control           |
| 14    | --           | --          | Not Used                                |
| 15    | 0.5 GY/WH    | 3122        | HO2S Heater Low Control Bank 1 Sensor 2 |
| 16    | 0.5 OG/WH    | 3223        | HO2S Heater Low Control Bank 2 Sensor 2 |
| 17    | 0.5 PU/WH    | 1668        | HO2S High Signal Bank 1 Sensor 2        |
| 18    | 0.35 L-BU    | 1162        | APP Sensor 2 Signal                     |
| 19    | 0.5 PK       | 439         | Ignition 1 Voltage                      |
| 20    | 0.5 RD/WH    | 440         | Battery Positive Voltage                |
| 21    | 0.35 PU      | 1272        | Low Reference                           |
| 22-23 | --           | --          | Not Used                                |



(chart continued on next page)

## Engine Control Module (ECM): LU3 - 4.3L Gas - Connector X-1 (continued)

chart continued from previous page

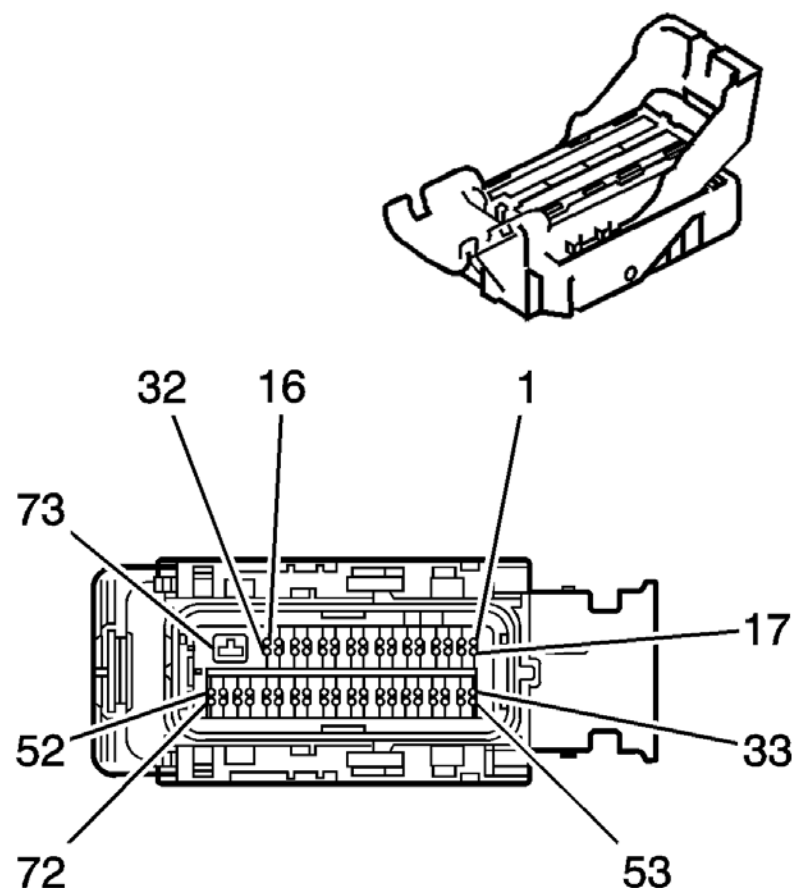
| Pin   | Wire Color   | Circuit No. | Function                                         |
|-------|--------------|-------------|--------------------------------------------------|
| 24    | 0.35 TN/BK   | 6049        | Low Reference                                    |
| 25    | 0.35 OG/BK   | 380         | A/C Refrigerant Pressure Sensor Signal (CJ2/C67) |
| 26    | 0.5 GY/BK    | 1694        | 4WD Low Signal (NQG/NP2)                         |
| 27    | 0.35 BN/WH   | 419         | MIL Control                                      |
| 28-29 | --           | --          | Not Used                                         |
| 30    | 0.35 D-GN/WH | 459         | A/C Compressor Clutch Relay Control (CJ2/C67)    |
| 31    | --           | --          | Not Used                                         |
| 32    | 0.35 YE/BK   | 625         | Starter Relay Coil Control                       |
| 33-34 | --           | --          | Not Used                                         |
| 35    | 0.5 TN       | 2760        | Low Reference                                    |
| 36    | --           | --          | Not Used                                         |
| 37    | 0.5 YE       | 492         | MAF Sensor Signal                                |
| 38    | --           | --          | Not Used                                         |
| 39    | 0.35 PU      | 1589        | Fuel Level Sensor Signal - Primary               |
| 40    | --           | --          | Not Used                                         |
| 41    | 0.35 BN      | 1271        | Low Reference                                    |
| 42    | 0.35 D-GN    | 890         | Fuel Tank Pressure Sensor Signal                 |
| 43    | 0.5 TN/BK    | 2500        | High Speed GMLAN Serial Data Bus+                |
| 44    | 0.5 TN       | 2501        | High Speed GMLAN Serial Data Bus-                |

| Pin   | Wire Color  | Circuit No. | Function                             |
|-------|-------------|-------------|--------------------------------------|
| 45-46 | --          | --          | Not Used                             |
| 47    | 0.35 WH/BK  | 1164        | 5V-2                                 |
| 48    | --          | --          | Not Used                             |
| 49    | 0.35 D-BU   | 473         | High Speed Cooling Fan Relay Control |
| 50    | 0.35 YE/BK  | 1827        | Vehicle Speed Signal                 |
| 51-53 | --          | --          | Not Used                             |
| 54    | 0.35 OG/BK  | 6399        | Replicated TOS Signal                |
| 55    | 0.5 L-BU/WH | 6311        | TCC Brake Signal                     |
| 56    | --          | --          | Not Used                             |
| 57    | 0.35 OG/BK  | 1786        | Park/Neutral Signal                  |
| 58    | 0.5 TN      | 472         | IAT Sensor Signal                    |
| 59-64 | --          | --          | Not Used                             |
| 65    | 0.35 GY     | 2700        | 5V-1                                 |
| 66    | 0.35 GY     | 2709        | 5V-1                                 |
| 67    | 0.35 TN     | 1274        | 5V-1                                 |
| 68-69 | --          | --          | Not Used                             |
| 70    | 0.5 WH      | 1310        | EVAP Canister Vent Solenoid Control  |
| 71    | --          | --          | Not Used                             |
| 72    | 0.5 TN/WH   | 1695        | Axle Switch Signal (NQG/NP2)         |
| 73    | 0.5 PK      | 1339        | Ignition 1 Voltage                   |

## Engine Control Module (ECM): LU3 - 4.3L Gas - Connector X-2

OEM: 15497996  
 Service: 88988372  
 Description: 73-Way F 0.64 2.8 Series Sealed (BK)

| Pin   | Wire Color  | Circuit No. | Function                             |
|-------|-------------|-------------|--------------------------------------|
| 1-3   | --          | --          | Not Used                             |
| 4     | 0.5 TN      | 2761        | Low Reference                        |
| 5     | 0.35 GY/BK  | 6272        | Low Reference                        |
| 6     | 0.5 TN      | 1744        | Fuel Injector 1 Control              |
| 7     | 0.5 YE/BK   | 846         | Fuel Injector 6 Control              |
| 8     | 0.5 TN/WH   | 845         | Fuel Injector 5 Control              |
| 9     | 0.5 BN      | 2129        | Low Reference                        |
| 10    | 0.5 L-BU/BK | 844         | Fuel Injector 4 Control              |
| 11    | 0.5 PK/BK   | 1746        | Fuel Injector 3 Control              |
| 12    | 0.5 L-GN/BK | 1745        | Fuel Injector 2 Control              |
| 13    | 0.5 GY      | 2704        | 5V-1                                 |
| 14-15 | --          | --          | Not Used                             |
| 16    | 0.5 YE      | 581         | TAC Motor Control - 1                |
| 17-19 | --          | --          | Not Used                             |
| 20    | 0.35 BN     | 6266        | Low Reference                        |
| 21    | --          | --          | Not Used                             |
| 22    | 0.5 PU      | 2121        | IC 1 Control                         |
| 23    | 0.5 L-BU    | 2123        | IC 3 Control                         |
| 24    | 0.5 OG/WH   | 2122        | IC 2 Control                         |
| 25-29 | --          | --          | Not Used                             |
| 30    | 0.5 D-GN/WH | 428         | EVAP Canister Purge Solenoid Control |



(chart continued on next page)

## Engine Control Module (ECM): LU3 – 4.3L Gas – Connector X-2 (continued)

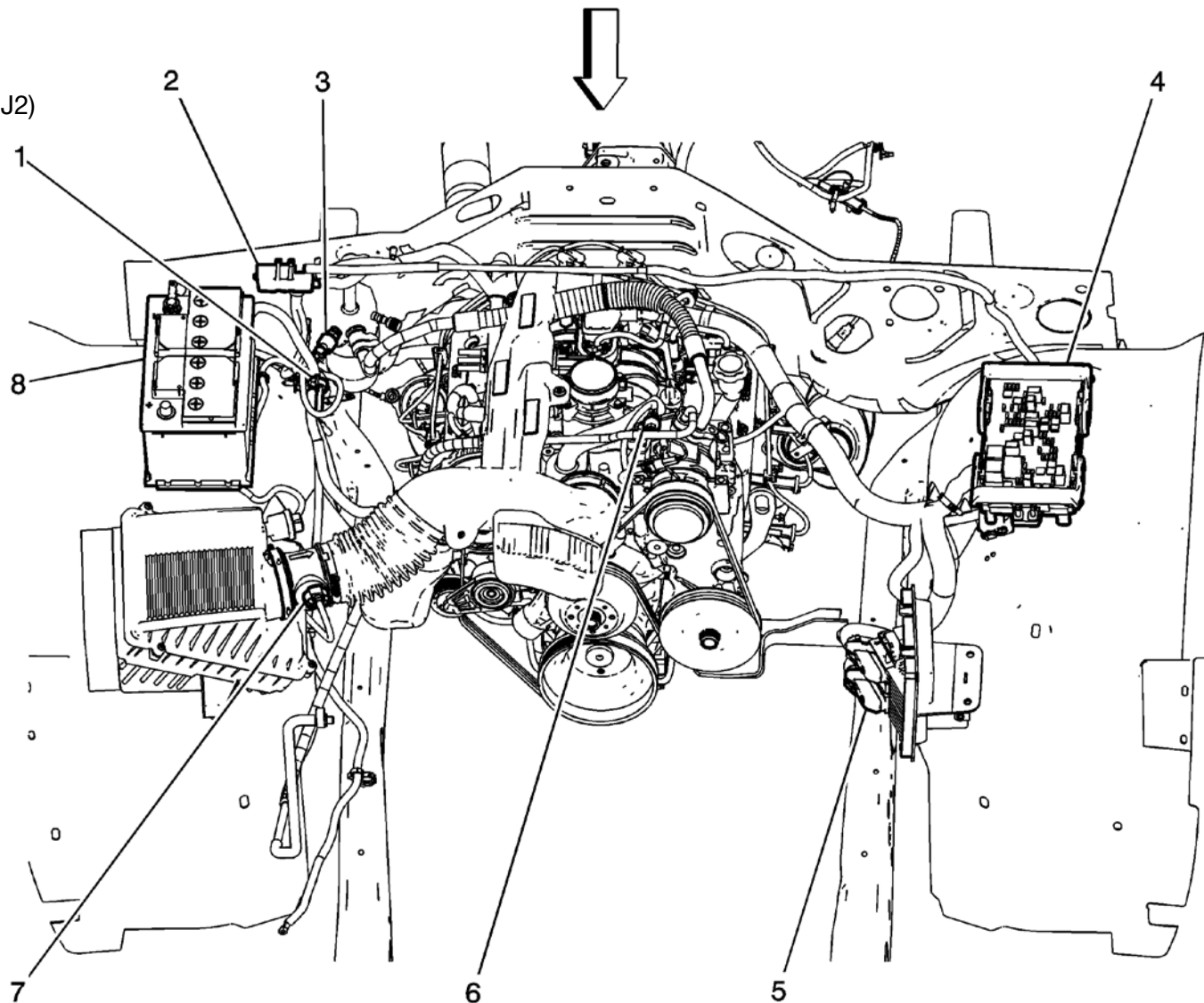
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| Pin | Wire Color   | Circuit No. | Function                          |
|-----|--------------|-------------|-----------------------------------|
| 31  | 0.5 BN       | 25          | Charge Indicator Signal           |
| 32  | 0.5 BN       | 582         | TAC Motor Control - 2             |
| 33  | 0.35 D-BU    | 6259        | 5V-1                              |
| 34  | --           | --          | Not Used                          |
| 35  | 0.35 GY      | 2705        | 5V-1                              |
| 36  | 0.35 TN/WH   | 331         | Oil Pressure Sensor Signal        |
| 37  | 0.5 PU/WH    | 1665        | HO2S High Signal Bank 1 Sensor 1  |
| 38  | 0.5 PU       | 1666        | HO2S High Signal Bank 2 Sensor 1  |
| 39  | 0.5 L-GN     | 432         | MAP Sensor Signal                 |
| 40  | 0.35 TN      | 2752        | Low Reference                     |
| 41  | 0.35 BK      | 2755        | Low Reference                     |
| 42  | --           | --          | Not Used                          |
| 43  | 0.5 GY       | 23          | Generator Field Duty Cycle Signal |
| 44  | --           | --          | Not Used                          |
| 45  | 0.35 WH/BK   | 6271        | CKP Sensor Signal                 |
| 46  | 0.35 D-BU/WH | 6265        | CMP Sensor Signal                 |
| 47  | --           | --          | Not Used                          |
| 48  | 0.5 TN       | 1664        | HO2S Low Signal Bank 1 Sensor 1   |
| 49  | 0.5 OG/BK    | 469         | Low Reference                     |

| Pin   | Wire Color | Circuit No. | Function                                |
|-------|------------|-------------|-----------------------------------------|
| 50    | 0.5 GY     | 1716        | KS 1 Signal                             |
| 51    | 0.5 D-BU   | 496         | KS 1 Signal                             |
| 52    | --         | --          | Not Used                                |
| 53    | 0.35 GY    | 2701        | 5V-2                                    |
| 54    | 0.35 PU/WH | 6270        | 5V-2                                    |
| 55-56 | --         | --          | Not Used                                |
| 57    | 0.35 D-GN  | 485         | TP Sensor 1 Signal                      |
| 58    | 0.5 YE     | 410         | ECT Sensor Signal                       |
| 59    | 0.35 PU    | 486         | TP Sensor 2 Signal                      |
| 60-64 | --         | --          | Not Used                                |
| 65    | 0.5 GY/WH  | 3113        | HO2S Heater Low Control Bank 1 Sensor 1 |
| 66    | 0.5 L-GN   | 3212        | HO2S Heater Low Control Bank 2 Sensor 1 |
| 67    | --         | --          | Not Used                                |
| 68    | 0.5 TN     | 1667        | HO2S Low Signal Bank 2 Sensor 1         |
| 69    | --         | --          | Not Used                                |
| 70    | 0.5 GY     | 2303        | KS 2 Signal                             |
| 71    | 0.5 L-BU   | 1876        | KS 2 Signal                             |
| 72    | --         | --          | Not Used                                |
| 73    | 3 BK/WH    | 451         | Ground                                  |

## Engine Control Module (ECM): LU3 – 4.3L Gas – Location

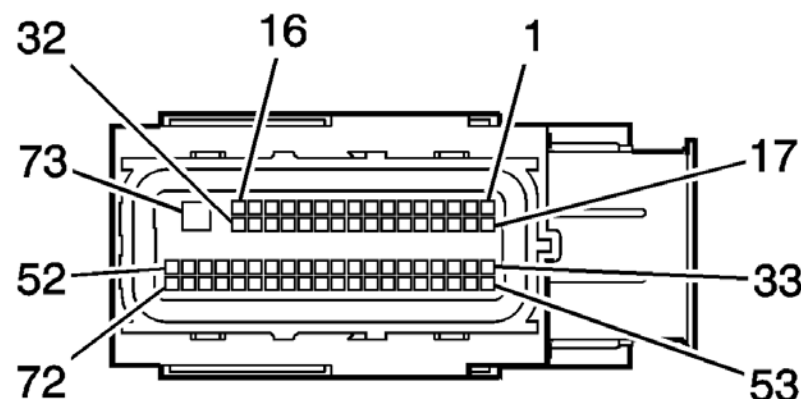
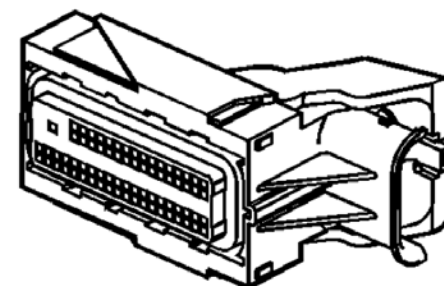
- (1) Battery Current Sensor
- (2) Mega Fuse
- (3) A/C Low Pressure Switch (C67/CJ2)
- (4) Fuse Block – Underhood
- (5) Engine Control Module (ECM)**
- (6) A/C Refrigerant Pressure Sensor (C67/CJ2)
- (7) Mass Airflow (MAF)/Intake Air Temperature (IAT) Sensor
- (8) Battery – Right



## Engine Control Module (ECM) – 4.8L, 5.3L & 6.0L Gas – Connector X-1

Connector: 73-Way F Receptable 0.64 Sealed (BK)  
 O.E.M.: 15499466  
 Color: **BLK**  
 Service: 88988931

| Pin   | Wire Color | Circuit No. | Function                               |
|-------|------------|-------------|----------------------------------------|
| 1     | OG/BK      | 1786        | Park/Neutral Signal                    |
| 2     | GY/BK      | 1694        | 4WD Low Signal                         |
| 3-8   | ---        | ---         | Not Used                               |
| 9     | L-BU/WH    | 6311        | Cruise/ETC/TCC Brake Signal            |
| 10    | PU/WH      | 1668        | HO2S High Signal [- Bank 1 Sensor X]   |
| 11    | TN/WH      | 1669        | HO2S Low Signal [- Bank 1 Sensor X]    |
| 12    | OG/BK      | 380         | A/C Refrigerant Pressure Sensor Signal |
| 13    | TN         | 5514        | Low Reference                          |
| 14-15 | ---        | ---         | Not Used                               |
| 16    | PU         | 1589        | Fuel Level Sensor Signal [- Primary]   |
| 17    | D-BU/WH    | 473         | High Speed Cooling Fan Relay Control   |
| 18    | D-BU       | 5985        | Accessory Wakeup Serial Data           |
| 19    | PK         | 439         | Ignition 1 Voltage                     |
| 20    | RD/WH      | 440         | Battery Positive Voltage               |
| 21-22 | ---        | ---         | Not Used                               |
| 23    | PU         | 1272        | Low Reference                          |
| 24    | D-GN       | 890         | Fuel Tank Pressure Sensor Signal       |
| 25-26 | ---        | ---         | Not Used                               |
| 27    | TN         | 2501        | High Speed GMLAN Serial Data Bus -     |
| 28    | TN/BK      | 2500        | High Speed GMLAN Serial Data Bus +     |
| 29    | D-BU       | 1161        | APP Sensor 1 Signal                    |
| 30    | BN         | 1271        | Low Reference                          |
| 31    | TN/BK      | 6049        | Fuel Tank Sensor Low Reference         |
| 32    | L-BU       | 1162        | APP Sensor 2 Signal                    |
| 33    | GY         | 2709        | 5-Volt Reference                       |
| 34    | GY/WH      | 2700        | A/C Pressure Sensor 5-Volt Reference   |
| 35    | ---        | ---         | Not Used                               |



(chart continued on next page)

## Engine Control Module (ECM) – 4.8L, 5.3L & 6.0L Gas – Connector X-1 (continued)

*chart continued from previous page*

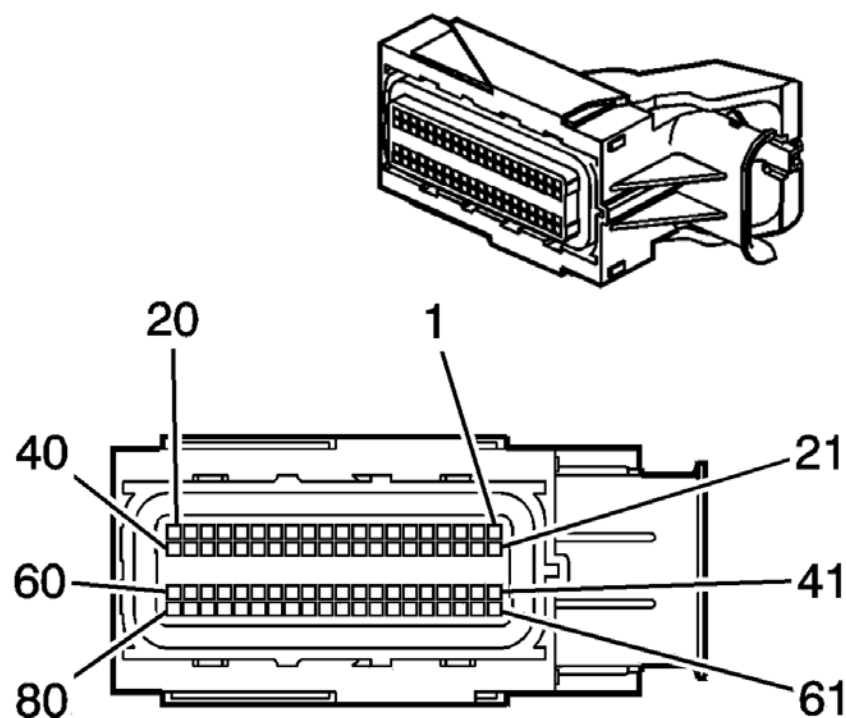
| Pin   | Wire Color | Circuit No. | Function                              |
|-------|------------|-------------|---------------------------------------|
| 36    | TN         | 1274        | 5-Volt Reference                      |
| 37    | TN/BK      | 472         | IAT Sensor Signal                     |
| 38    | TN         | 2760        | Low Reference                         |
| 39-40 | --         | --          | Not Used                              |
| 41    | YE         | 492         | MAF Sensor Signal                     |
| 42-46 | --         | --          | Not Used                              |
| 47    | PK/BK      | 1339        | Ignition 1 Voltage                    |
| 48    | --         | --          | Not Used                              |
| 49    | TN         | 1671        | HO2S Low Signal [- Bank 2 Sensor 2]   |
| 50    | D-GN/WH    | 465         | Fuel Pump Relay Control [- Primary]   |
| 51    | TN         | 1465        | Fuel Pump Relay Control [- Secondary] |
| 52    | YE/BK      | 625         | Starter Enable Relay Control          |
| 53-55 | --         | --          | Not Used                              |
| 56    | WH/BK      | 1164        | 5-Volt Reference                      |
| 57    | YE/BK      | 1827        | Vehicle Speed Signal                  |
| 58    | D-GN       | 335         | Low Speed Cooling Fan Relay Control   |

| Pin   | Wire Color | Circuit No. | Function                                    |
|-------|------------|-------------|---------------------------------------------|
| 59    | YE         | 5991        | Powertrain Relay Coil Control               |
| 60    | --         | --          | Not Used                                    |
| 61    | WH         | 1310        | EVAP Canister Vent Solenoid Control         |
| 62    | --         | --          | Not Used                                    |
| 63    | D-GN/WH    | 459         | A/C Compressor Clutch Relay Control         |
| 64    | OG/WH      | 3223        | HO2S Heater Low Control (Bank 2 Sensor 2)   |
| 65    | GY/WH      | 3122        | HO2S Heater Low Control [- Bank 2 Sensor 1] |
| 66-67 | --         | --          | Not Used                                    |
| 68    | BN/WH      | 419         | MIL Control                                 |
| 69    | PU         | 1670        | HO2S High Signal [- Bank 2 Sensor 2]        |
| 70    | L-BU       | 1937        | Secondary Fuel Level Sensor Signal          |
| 71    | OG/BK      | 6399        | Replicated TOS Signal                       |
| 72    | --         | --          | Not Used                                    |
| 73    | BK/WH      | 451         | Ground                                      |

## Engine Control Module (ECM) - 4.8L, 5.3L & 6.0L Gas - Connector X-2

Connector: 80-Way F Receptacle 0.64 2.8 Sealed (GY)  
 O.E.M.: 13511426  
 Color: **GY**  
 Service: 19115670

| Pin   | Wire Color | Circuit No. | Function                                    |
|-------|------------|-------------|---------------------------------------------|
| 1     | --         | --          | Not Used                                    |
| 2     | PU/WH      | 6270        | 5-Volt Reference                            |
| 3     | GY         | 2701        | 5-Volt Reference                            |
| 4     | --         | --          | Not Used                                    |
| 5     | BN         | 582         | TAC Motor Control - 2                       |
| 6     | YE         | 581         | TAC Motor Control - 1                       |
| 7     | --         | --          | Not Used                                    |
| 8     | D-GN/WH    | 428         | EVAP Canister Purge Solenoid Control        |
| 9     | GY         | 5493        | Cylinder Shutoff Solenoid Control (3)       |
| 10    | D-BU       | 5491        | Cylinder Shutoff Solenoid Control (1)       |
| 11    | OG         | 5494        | Cylinder Shutoff Solenoid Control (4)       |
| 12    | GY/WH      | 3113        | HO2S Heater Low Control [- Bank 1 Sensor 1] |
| 13    | L-GN       | 3212        | HO2S Heater Low Control [- Bank 2 Sensor 1] |
| 14    | L-GN/BK    | 5492        | Cylinder Shutoff Solenoid Control (2)       |
| 15    | --         | --          | Not Used                                    |
| 16    | PU         | 5284        | Camshaft Actuator Solenoid Control (AFM)    |
| 17    | D-BU/WH    | 878         | Fuel Injector 8 Control                     |
| 18    | TN/WH      | 845         | Fuel Injector 5 Control                     |
| 19    | YE/BK      | 846         | Fuel Injector 6 Control                     |
| 20    | TN         | 1744        | Fuel Injector 1 Control                     |
| 21    | YE         | 410         | ECT Sensor Signal                           |
| 22    | TN         | 2761        | Low Reference                               |
| 23-25 | --         | --          | Not Used                                    |
| 26    | D-BU       | 496         | Knock Sensor [1] Signal                     |



(chart continued on next page)

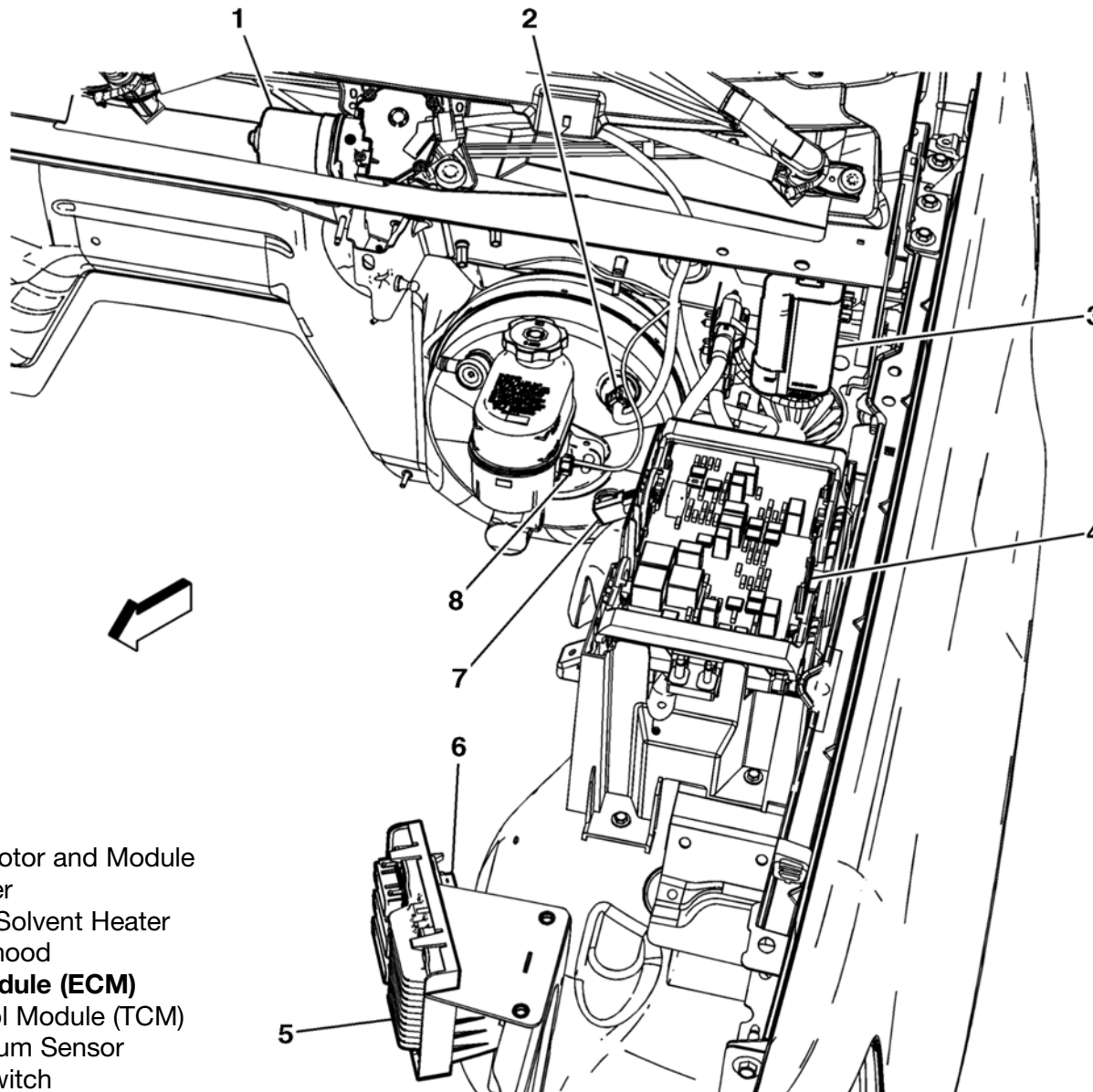
## Engine Control Module (ECM) - 4.8L, 5.3L & 6.0L Gas - Connector X-2 (continued)

chart continued from previous page

| Pin   | Wire Color | Circuit No. | Function                            |
|-------|------------|-------------|-------------------------------------|
| 27    | GY         | 1716        | Low Reference                       |
| 28    | --         | --          | Not Used                            |
| 29    | L-BU       | 1876        | Knock Sensor 2 Signal               |
| 30    | GY         | 2303        | Low Reference                       |
| 31    | --         | --          | Not Used                            |
| 32    | GY         | 23          | Generator Field Duty Cycle Signal   |
| 33    | BN         | 1174        | Oil Level Switch Signal             |
| 34    | BK         | 2755        | Low Reference                       |
| 35    | TN         | 2752        | Low Reference                       |
| 36    | --         | --          | Not Used                            |
| 37    | L-GN/BK    | 1745        | Fuel Injector 2 Control             |
| 38    | PK/BK      | 1746        | Fuel Injector 3 Control             |
| 39    | L-BU/BK    | 844         | Fuel Injector 4 Control             |
| 40    | OG/BK      | 877         | Fuel Injector 7 Control             |
| 41    | GY         | 2705        | 5-Volt Reference                    |
| 42    | --         | --          | Not Used                            |
| 43    | GY         | 2704        | 5-Volt Reference                    |
| 44    | D-BU       | 6259        | 5-Volt Reference                    |
| 45-49 | --         | --          | Not Used                            |
| 50    | TN/WH      | 331         | Oil Pressure Sensor Signal          |
| 51    | --         | --          | Not Used                            |
| 52    | TN         | 2199        | Low Reference                       |
| 53    | OG/BK      | 469         | Low Reference                       |
| 54-55 | --         | --          | Not Used                            |
| 56    | TN         | 1664        | HO2S Low Signal [- Bank 1 Sensor 1] |

| Pin | Wire Color | Circuit No. | Function                                         |
|-----|------------|-------------|--------------------------------------------------|
| 57  | PU/WH      | 1665        | HO2S High Signal [- Bank 1 Sensor 1]             |
| 58  | L-GN       | 432         | MAP Sensor Signal                                |
| 59  | PU         | 1666        | HO2S High Signal [- Bank 2 Sensor 1]             |
| 60  | TN         | 1667        | HO2S Low Signal [- Bank 2 Sensor 1]              |
| 61  | BN         | 25          | Charge Indicator Control/Charge Indicator Signal |
| 62  | --         | --          | Not Used                                         |
| 63  | PU         | 486         | TP Sensor 2 Signal                               |
| 64  | D-BU/WH    | 6265        | Camshaft CAM W Signal                            |
| 65  | D-GN       | 485         | TP Sensor 1 Signal                               |
| 66  | BN         | 6266        | Camshaft CAM W Ground                            |
| 67  | --         | --          | Not Used                                         |
| 68  | WH/BK      | 6271        | Crankshaft 60X Sensor Signal                     |
| 69  | GY/BK      | 6272        | Crankshaft 60X Sensor Low Reference              |
| 70  | PU         | 2121        | IC 1 Control                                     |
| 71  | PU/WH      | 2128        | IC 8 Control                                     |
| 72  | OG         | 2127        | IC 7 Control                                     |
| 73  | OG/WH      | 2122        | IC 2 Control                                     |
| 74  | L-BU/WH    | 2126        | IC 6 Control                                     |
| 75  | D-GN       | 2125        | IC 5 Control                                     |
| 76  | D-GN/WH    | 2124        | IC 4 Control                                     |
| 77  | L-BU       | 2123        | IC 3 Control                                     |
| 78  | BN         | 2129        | Low Reference                                    |
| 79  | BN/WH      | 2130        | Low Reference                                    |
| 80  | --         | --          | Not Used                                         |

## Engine Control Module (ECM) – 4.8L, 5.3L & 6.0L Gas – Location

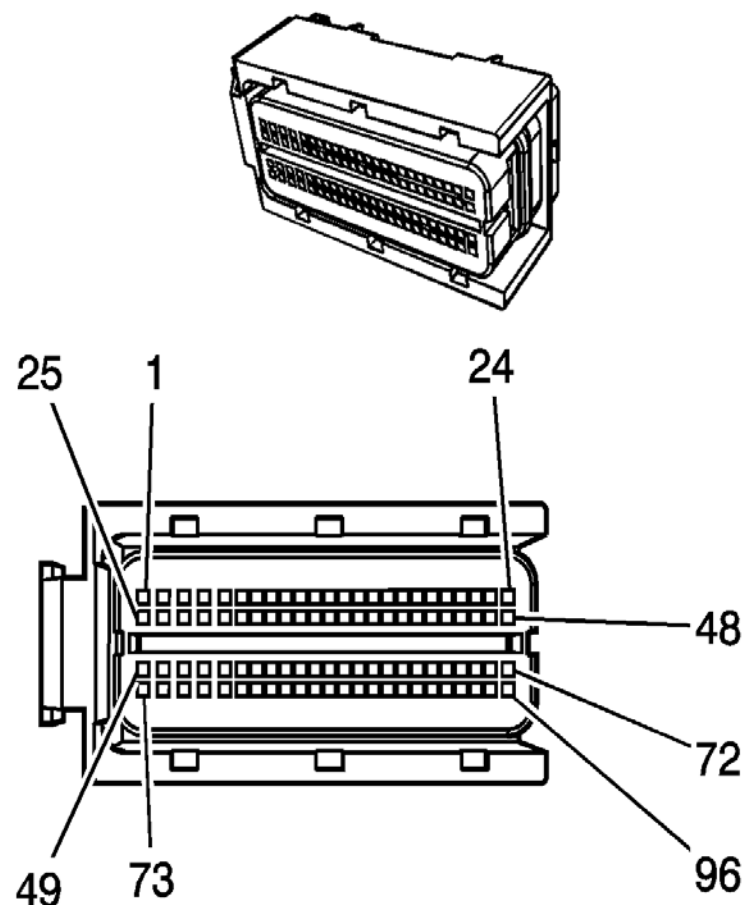


- (1) Windshield Wiper Motor and Module
- (2) Power Brake Booster
- (3) Windshield Washer Solvent Heater
- (4) Fuse Block - Underhood
- (5) Engine Control Module (ECM)**
- (6) Transmission Control Module (TCM)
- (7) Brake Booster Vacuum Sensor
- (8) Brake Fluid Level Switch

## Engine Control Module (ECM): LMM 6.6L Diesel – Connector X-1

OEM: 15438366  
 Service: 19149311  
 Description: 96-Way F Sealed  
 Color: **BLK**

| Pin | Wire Color | Circuit No. | Function                                 |
|-----|------------|-------------|------------------------------------------|
| 1   | 1 OG       | 5421        | Fuel Injector Supply Voltage 1           |
| 2   | 1 D-BU/WH  | 878         | Fuel Injector 8                          |
| 3   | 1 OG/BK    | 877         | Fuel Injector 7 Control                  |
| 4   | 0.5 D-BU   | 2364        | Cooling Fan Speed Signal                 |
| 5   | 0.5 YE     | 492         | MAF Sensor Signal                        |
| 6   | 0.5 OG/BK  | 469         | Low Reference                            |
| 7-8 | --         | --          | Not Used                                 |
| 9   | 0.5 BN     | 1174        | Oil Level Switch Signal                  |
| 10  | --         | --          | Not Used                                 |
| 11  | 0.5 GY/BK  | 6272        | Low Reference                            |
| 12  | 0.5 GY     | 2704        | 5-Volt Reference 3                       |
| 13  | 0.5 TN     | 5928        | 5-Volt Reference 3                       |
| 14  | 0.5 GY     | 6054        | 5-Volt Reference 2                       |
| 15  | 0.5 GY     | 2705        | 5-Volt Reference 2                       |
| 16  | --         | --          | Not Used                                 |
| 17  | 0.5 GY     | 2701        | 5-Volt Reference 1                       |
| 18  | --         | --          | Not Used                                 |
| 19  | 0.5 L-GN   | 432         | MAP Sensor Signal                        |
| 20  | 0.5 YE     | 5947        | Turbocharger Vane Position Sensor Signal |
| 21  | 0.5 L-BU   | 1162        | APP Sensor 2 Signal                      |
| 22  | --         | --          | Not Used                                 |
| 23  | 0.5 BK     | 2755        | Low Reference                            |



(chart continued on next page)

## Engine Control Module (ECM): LMM 6.6L Diesel – Connector X-1 (continued)

*chart continued from previous page*

| Pin   | Wire Color | Circuit No. | Function                                                  |
|-------|------------|-------------|-----------------------------------------------------------|
| 24    | 0.5 PU/WH  | 2530        | Fuel Pressure Regulator Solenoid Supply Voltage           |
| 25    | 1 PK       | 5425        | Fuel Injector Supply Voltage 4                            |
| 26    | 1 YE/BK    | 846         | Fuel Injector 6 Control                                   |
| 27    | 1 PK/BK    | 1746        | Fuel Injector 3 Control                                   |
| 28    | 0.5 WH/BK  | 2366        | Cooling Fan Clutch Control                                |
| 29    | --         | --          | Not Used                                                  |
| 30    | 0.5 OG/BK  | 2919        | Low Reference                                             |
| 31-32 | --         | --          | Not Used                                                  |
| 33    | 0.5 GY/BK  | 2931        | Low Reference                                             |
| 34    | --         | --          | Not Used                                                  |
| 35    | 0.5 YE/BK  | 6055        | Low Reference                                             |
| 36    | 0.5 TN     | 2752        | Low Reference                                             |
| 37    | 0.5 GY     | 2702        | 5-Volt Reference 3                                        |
| 38    | 0.5 TN     | 1274        | 5-Volt Reference 2                                        |
| 39    | 0.5 TN     | 2917        | 5-Volt Reference 2                                        |
| 40    | 0.5 PU/WH  | 6270        | 5-Volt Reference 1                                        |
| 41    | 0.5 D-BU   | 6259        | 5-Volt Reference 1                                        |
| 42    | 0.5 TN     | 472         | IAT Sensor Signal                                         |
| 43    | 0.5 D-BU   | 6053        | DPF Sensor Signal                                         |
| 44    | 0.5 TN/WH  | 331         | Oil Pressure Sensor Signal                                |
| 45    | 0.5 L-GN   | 2032        | ECT Sensor Signal                                         |
| 46    | --         | --          | Not Used                                                  |
| 47    | 0.5 TN     | 2761        | Low Reference                                             |
| 48    | 0.5 D-BU   | 5930        | Turbocharger Vane Position Control Solenoid Valve Control |

| Pin   | Wire Color  | Circuit No. | Function                                 |
|-------|-------------|-------------|------------------------------------------|
| 49    | 1 PU        | 5423        | Fuel Injector Supply Voltage 3           |
| 50    | 1 TN/WH     | 845         | Fuel Injector 5 Control                  |
| 51    | 1 L-BU/BK   | 844         | Fuel Injector 4 Control                  |
| 52    | --          | --          | Not Used                                 |
| 53    | 0.5 YE/BK   | 6120        | Low Reference                            |
| 54-55 | --          | --          | Not Used                                 |
| 56    | 0.5 D-BU/WH | 6265        | CMP Sensor Signal                        |
| 57    | 0.5 GY/BK   | 1694        | 4WD Low Signal (NQG)                     |
| 58-61 | --          | --          | Not Used                                 |
| 62    | 0.5 TN      | 2760        | Low Reference                            |
| 63    | 0.5 OG/BK   | 5929        | Low Reference                            |
| 64    | 0.5 L-BU/BK | 6813        | Low Reference                            |
| 65    | 0.5 L-BU    | 6118        | Air Temperature Sensor Signal            |
| 66    | --          | --          | Not Used                                 |
| 67    | 0.5 BN/WH   | 5763        | EGR Valve Sensor Signal                  |
| 68    | 0.5 YE      | 410         | ECT Sensor Signal                        |
| 69    | 0.5 D-BU    | 5277        | Exhaust Gas Temperature Sensor           |
| 70    | 0.5 BN      | 6782        | Low Reference                            |
| 71    | 0.5 YE/BK   | 625         | Starter Enable Relay Control             |
| 72    | 0.5 YE      | 2834        | Fuel Pressure Regulator Solenoid Control |
| 73    | 1 YE        | 5422        | Fuel Injector Supply Voltage 2           |
| 74    | 1 TN        | 1744        | Fuel Injector 1 Control                  |
| 75    | 1 L-GN/BK   | 1745        | Fuel Injector 2 Control                  |
| 76    | 0.5 PK      | 1339        | Ignition 1 Voltage                       |

*(chart continued on next page)*

## Engine Control Module (ECM): LMM 6.6L Diesel – Connector X-1 (continued)

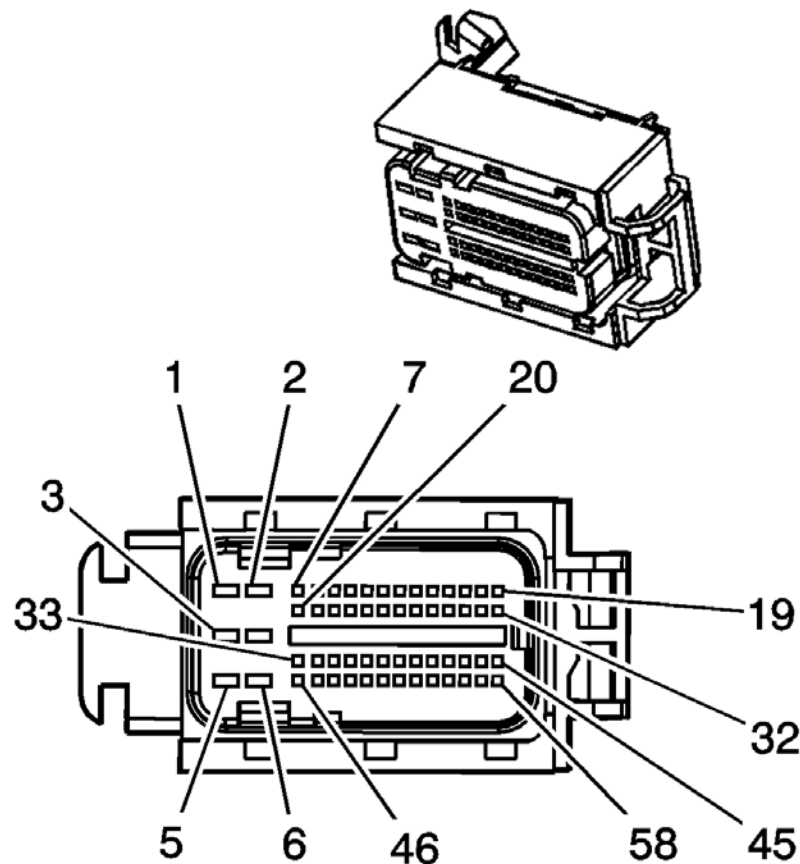
*chart continued from previous page*

| Pin   | Wire Color      | Circuit No. | Function                                    |
|-------|-----------------|-------------|---------------------------------------------|
| 77    | 0.5 RD/WH       | 440         | Battery Positive Voltage                    |
| 78    | 0.5 PU          | 1272        | Low Reference                               |
| 79    | 0.5 WH/BK       | 6271        | CKP Sensor Signal                           |
| 80-81 | --              | --          | Not Used                                    |
| 82    | 0.5 TN/WH       | 1695        | Axle Switch Signal (NQG)                    |
| 83    | 0.5 L-BU/<br>WH | 6311        | TCC Brake Signal                            |
| 84    | 0.5 D-GN/<br>WH | 6142        | Power Take Off Engine Shutdown Signal (PTO) |
| 85    | 0.5 YE/BK       | 508         | Low Reference                               |
| 86    | 0.5 TN          | 2753        | Low Reference                               |
| 87    | 0.5 GY/BK       | 5765        | Fuel Filter Pressure Switch Signal          |
| 88    | 0.5 BN          | 6266        | Low Reference                               |
| 89-90 | --              | --          | Not Used                                    |
| 91    | 0.5 D-GN        | 485         | TP Sensor Signal                            |
| 92    | 0.5 YE          | 2918        | FRP Sensor Signal                           |
| 93    | 0.5 L-BU        | 5377        | Exhaust Gas Temperature Sensor              |
| 94    | 0.5 BN/WH       | 6783        | Low Reference                               |
| 95    | --              | --          | Not Used                                    |
| 96    | 0.5 WH          | 5931        | Low Reference                               |

## Engine Control Module (ECM): LMM 6.6L Diesel – Connector X-2

OEM: 15462694  
 Service: 88988935  
 Description: 58-Way F Mixed Series Sealed  
 Color: **BLK**

| Pin   | Wire Color  | Circuit No. | Function                        |
|-------|-------------|-------------|---------------------------------|
| 1     | 2 PK        | 1439        | Ignition 1 Voltage              |
| 2     | 2 BK/WH     | 451         | Ground                          |
| 3     | 2 PK        | 1439        | Ignition 1 Voltage              |
| 4     | 2 BK/WH     | 451         | Ground                          |
| 5     | 2 PK        | 1439        | Ignition 1 Voltage              |
| 6     | 2 BK/WH     | 451         | Ground                          |
| 7     | 0.8 BN      | 582         | Motor Control - 2               |
| 8     | 0.8 BN      | 25          | Charge Indicator Control        |
| 9-11  | --          | --          | Not Used                        |
| 12    | 0.5 D-GN/WH | 465         | Fuel Pump Relay Control         |
| 13    | 0.5 TN      | 5514        | Low Reference (CJ2/C67)         |
| 14    | --          | --          | Not Used                        |
| 15    | 0.5 WH/BK   | 1164        | 5-Volt Reference 3              |
| 16    | 0.5 D-BU    | 507         | Wait to Start Indicator Control |
| 17-18 | --          | --          | Not Used                        |
| 19    | 0.5 YE      | 5991        | Powertrain Relay Coil Control   |
| 20    | 0.8 YE      | 581         | Motor Control - 1               |
| 21    | 0.5 PK      | 439         | Ignition 1 Voltage              |
| 22-25 | --          | --          | Not Used                        |
| 26    | 0.5 BN/WH   | 6141        | Low References                  |
| 27    | 0.5 GY      | 2700        | 5-Volt Reference 2 (CJ2/C67)    |



(chart continued on next page)

## Engine Control Module (ECM): LMM 6.6L Diesel – Connector X-2 (continued)

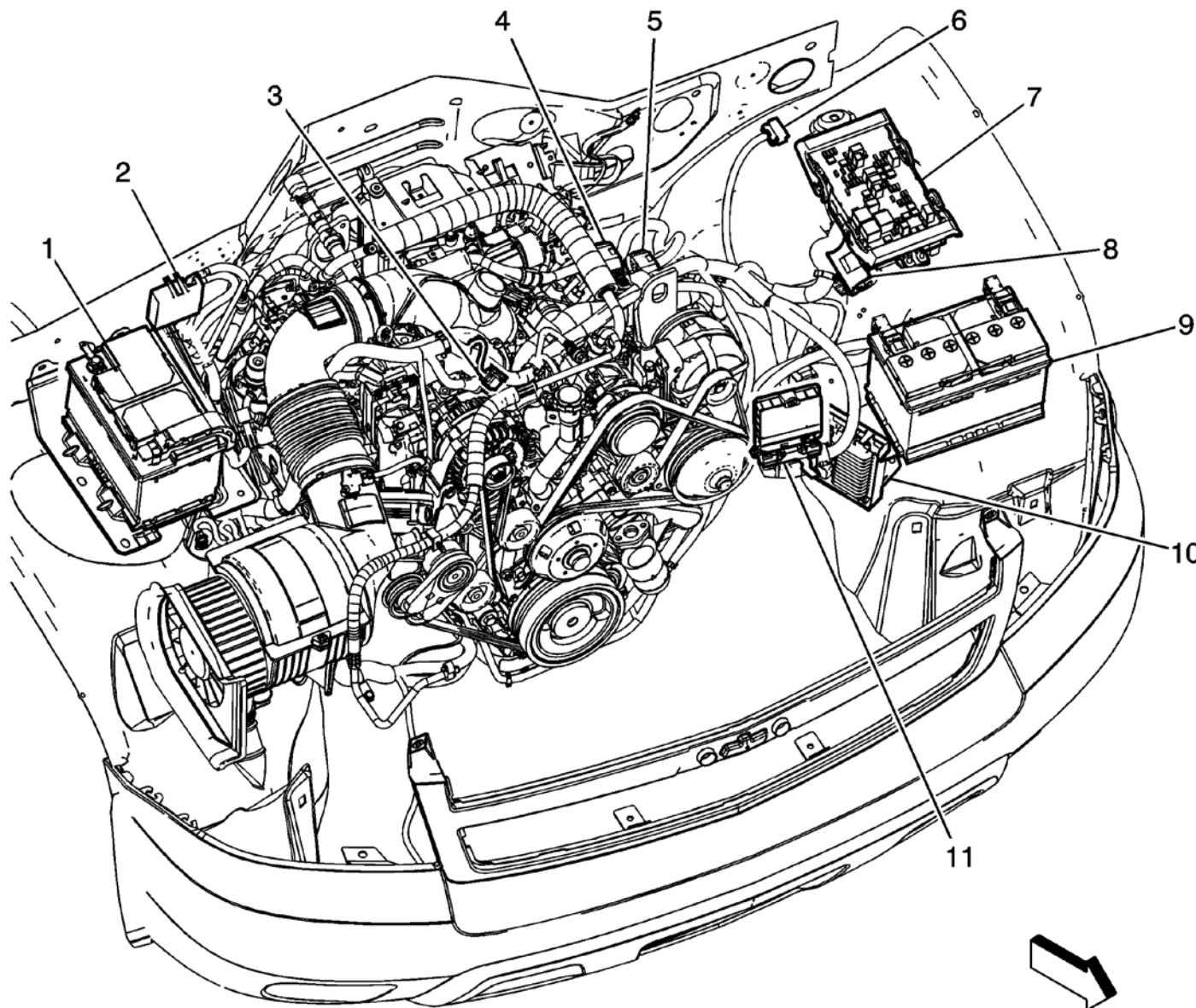
chart continued from previous page

| Pin   | Wire Color  | Circuit No. | Function                                          |
|-------|-------------|-------------|---------------------------------------------------|
| 28    | 0.5 GY      | 2365        | 5-Volt Reference                                  |
| 29    | 0.5 BN      | 1271        | Low Reference                                     |
| 30    | 0.5 BN/WH   | 419         | MIL Control                                       |
| 31    | 0.5 D-GN/WH | 459         | A/C Compressor Clutch Relay Control (CJ2/C67)     |
| 32    | --          | --          | Not Used                                          |
| 33    | 0.5 OG/BK   | 5764        | Exhaust Gas Recirculation Valve Motor High Signal |
| 34    | 0.5 TN/BK   | 6049        | Low Reference                                     |
| 35    | 0.5 OG/BK   | 380         | A/C Refrigerant Pressure Sensor Signal (CJ2/C67)  |
| 36    | 0.5 PU      | 1589        | Fuel Level Sensor Signal                          |
| 37    | --          | --          | Not Used                                          |
| 38    | 0.8 GY      | 23          | Generator Field Duty Cycle Signal                 |
| 39    | 0.5 OG/BK   | 1786        | Park/Neutral Signal                               |
| 40-43 | --          | --          | Not Used                                          |

| Pin   | Wire Color  | Circuit No. | Function                                  |
|-------|-------------|-------------|-------------------------------------------|
| 44    | 0.5 TN      | 2501        | High Speed GMLAN Serial Data Bus (-)      |
| 45    | 0.5 OG/BK   | 6399        | VSS High Signal                           |
| 46    | 0.5 L-GN/BK | 5746        | EGR Valve Motor Low Control               |
| 47    | 0.5 BN      | 6062        | Low Reference                             |
| 48    | 0.5 YE      | 1578        | Fuel Temperature Sensor Signal            |
| 49    | 0.5 D-BU    | 1161        | APP Sensor 1 Signal                       |
| 50    | 0.5 L-BU    | 1937        | Secondary Fuel Level Sensor Signal (-NQZ) |
| 51-53 | --          | --          | Not Used                                  |
| 54    | 0.5 YE/BK   | 1827        | Vehicle Speed Signal                      |
| 55    | --          | --          | Not Used                                  |
| 56    | 0.5 D-BU    | 5985        | Accessory Wakeup Serial Data              |
| 57    | 0.5 TN/BK   | 2500        | High Speed GMLAN Serial Data Bus (+)      |
| 58    | --          | --          | Not Used                                  |

## Engine Control Module (ECM): LMM 6.6L Diesel – Location

- (1) Battery – Right
- (2) Fuse Holder – Underhood
- (3) X127
- (4) X108
- (5) X107
- (6) X123 (PTO)
- (7) Fuse Block – Underhood
- (8) X109
- (9) Battery – Left (6A6/TP2)
- (10) Engine Control Module (ECM)**
- (11) Transmission Control Module (TCM)

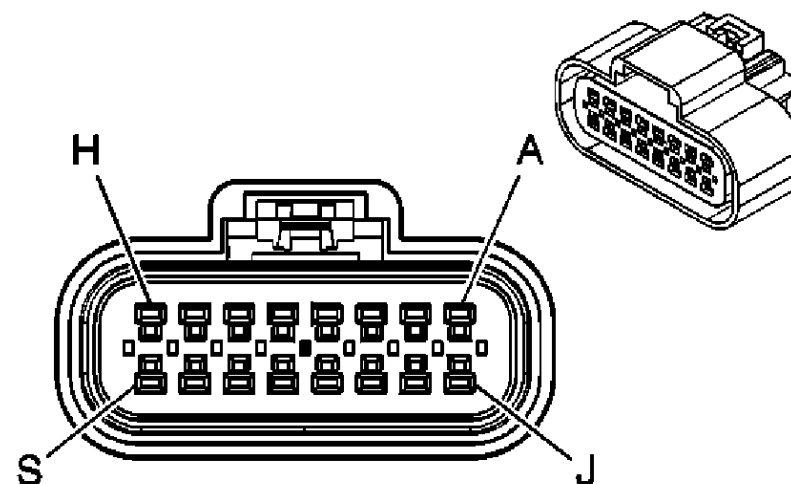


## X124 – Engine Harness to PTO Jumper Harness (PTO)

### 9.2. Connector Pin Functions

| Pin | Circuit Number* | Wire Color* | Description                                                        |
|-----|-----------------|-------------|--------------------------------------------------------------------|
| A   | 6085            | BN/WH       | Remote Engine Start Input                                          |
| B   | 494             | L-BU        | Remote Engine Shutdown Input                                       |
| C   | 978             | GY          | PTO Remote Enable Input                                            |
| D   | 550             | BK          | Power Ground                                                       |
| E   | 975             | WH          | +5 volt Sensor/Switch Reference (50 ma)                            |
| F   | 6142            | D-GN/WH     | PTO Switch Reference Output (300 ma)                               |
| G   | 2522            | YE          | PTO Load Feedback                                                  |
| H   | 2562            | PU          | PTO Relay Low-Side Control Output                                  |
| J   | 6381            | BN          | PTO Relay High-Side Control Output                                 |
| K   | 2640            | RD/WH       | Battery (10 Amp Fused) Output                                      |
| L   | 6089            | D-BU/WH     | PTO Remote Set A Input                                             |
| M   | 976             | GY/BK       | Ground Reference                                                   |
| N   | 977             | L-BU        | PTO Remote Accelerator Input                                       |
| P   | 979             | D-BU        | Remote Start Arming                                                |
| R   | 239             | PK          | Ignition (Switched Run/Crank)                                      |
| S   | 981             | TN          | PTO Remote Indicator Lamp/Remote Tachometer (MY2009 Vehicles only) |

\* Vehicle harness Circuit Number and Wire Color

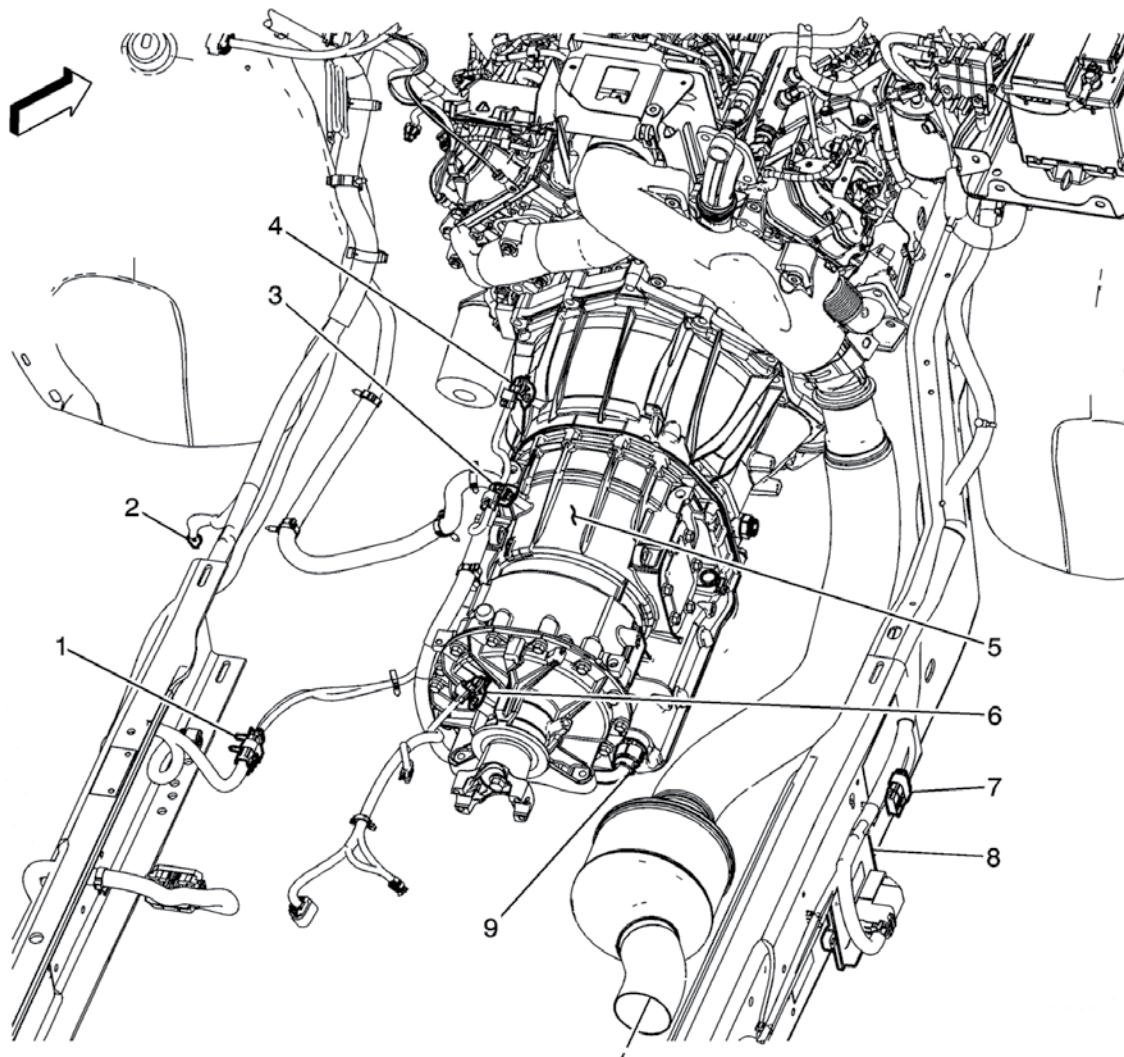


OEM: 15326863  
Service: 1530638  
Description: 16-Way F GT 150 Sealed (BK)

|                                 | Part Number | Type     | Description                                                                                                      |
|---------------------------------|-------------|----------|------------------------------------------------------------------------------------------------------------------|
| Terminal<br>Seals, and<br>Locks | 15358785    | Lock     | Purple Secondary Lock                                                                                            |
|                                 | 15366060    | Seal     | Blue Individual Loose Cable Seal                                                                                 |
|                                 | 15305171    | Seal     | Green Cable Cavity Cavity Plug                                                                                   |
|                                 | 15366021    | Seal     | White Individual Loose Cable Seal                                                                                |
|                                 | 15326268    | Terminal | Male GT 150 Tin Plated Terminal, Cable Range 0.50 - 0.35 mm <sup>2</sup> , Cable Insulation Range 1.85 - 1.20 mm |
|                                 | 15326269    | Terminal | Male GT 150 Tin Plated Terminal, Cable Range 1.00 - 0.75 mm <sup>2</sup> , Cable Insulation Range 2.25 - 1.70 mm |

## X124 – PTO Connector Location

- (1) X300
- (2) G300
- (3) Automatic Transmission Turbine Speed Sensor
- (4) Automatic Transmission Input Shaft Speed (AT ISS) Sensor
- (5) Automatic Transmission
- (6) Vehicle Speed Sensor (VSS)
- (7) X124**
- (8) Power Take Off (PTO) Module**
- (9) X175



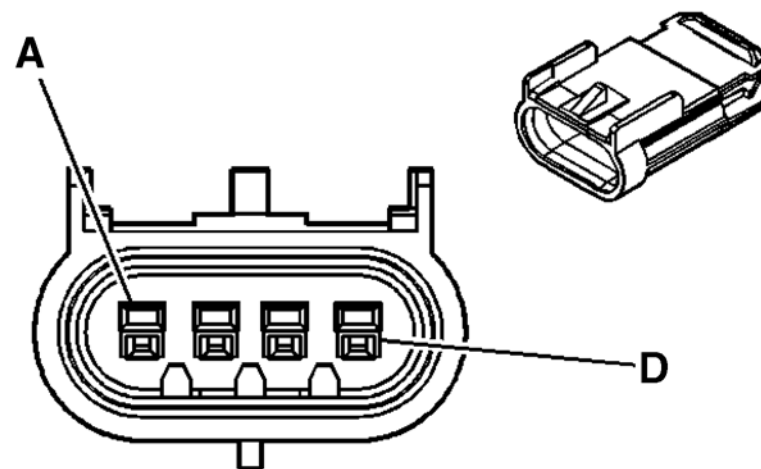
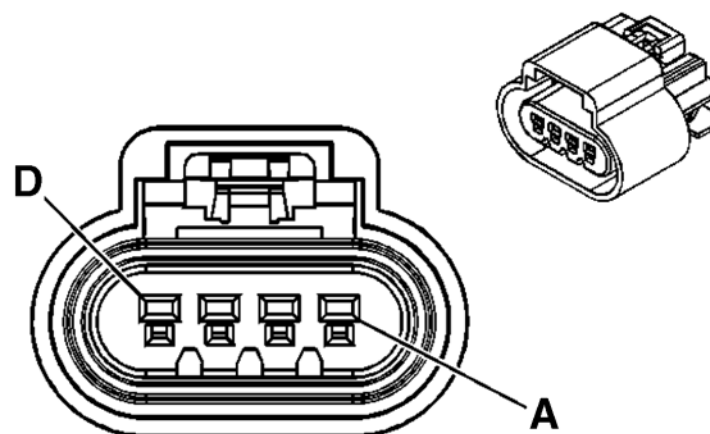
## Rear Lighting – Utility – C411 Chassis Harness to Left Rear Lamp Harness (Except E52/Z75)

Connector: 4-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326815  
 Color: **BLK**  
 Service: 15306396

| Pin | Wire Color | Circuit No. | Function                                |
|-----|------------|-------------|-----------------------------------------|
| A   | YE         | --          | Left Rear Stop/Turn Lamp Supply Voltage |
| B   | BK         | --          | Ground                                  |
| C   | BN         | --          | Left Rear Park Lamps Supply Voltage     |
| D   | L-GN       | --          | Backup Lamp Supply Voltage              |

Connector: 4-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326820  
 Color: **BLK**  
 Service: 15326820

| Pin | Wire Color | Circuit No. | Function                                |
|-----|------------|-------------|-----------------------------------------|
| A   | YE         | 18          | Left Rear Stop/Turn Lamp Supply Voltage |
| B   | BK         | 1750        | Ground                                  |
| C   | BN         | 2509        | Left Rear Park Lamps Supply Voltage     |
| D   | L-GN       | 24          | Backup Lamp Supply Voltage              |



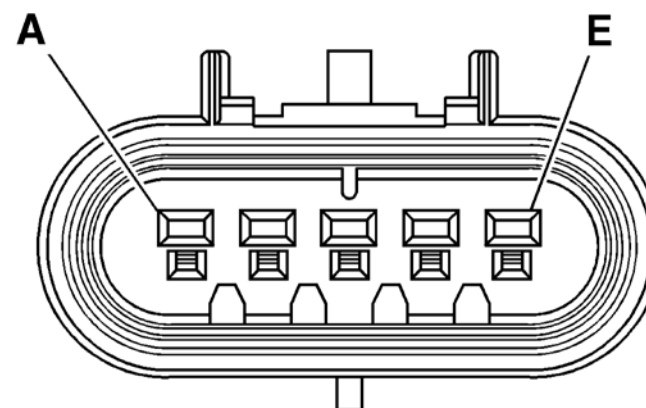
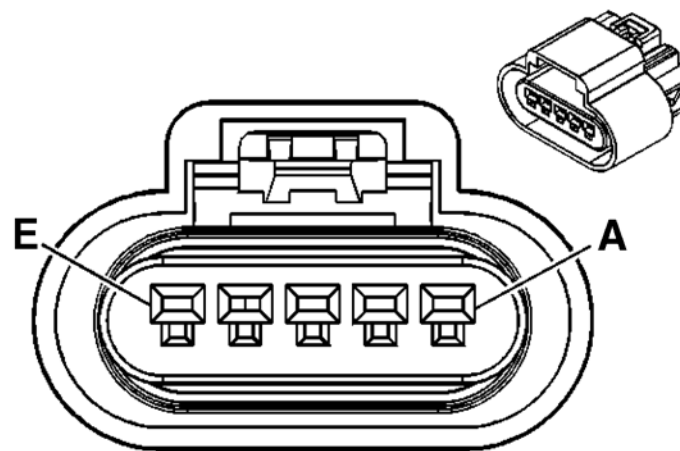
## Rear Lighting – Utility – C411 Chassis Harness to Left Rear Lamp Harness (E52 Except Z75)

Connector: 5-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326822  
 Color: **BLK**  
 Service: 88987186

| Pin | Wire Color | Circuit No. | Function                                  |
|-----|------------|-------------|-------------------------------------------|
| A   | YE/BK      | ---         | Left Rear Turn Signal Lamp Supply Voltage |
| B   | L-BU       | ---         | Stop Lamp Supply Voltage                  |
| C   | BK         | ---         | Ground                                    |
| D   | BN         | ---         | Left Rear Park Lamps Supply Voltage       |
| E   | L-GN       | ---         | Backup Lamp Supply Voltage                |

Connector: 5-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326827  
 Color: **BLK**  
 Service: 89046648

| Pin | Wire Color | Circuit No. | Function                                  |
|-----|------------|-------------|-------------------------------------------|
| A   | YE/BK      | 1334        | Left Rear Turn Signal Lamp Supply Voltage |
| B   | L-BU       | 20          | Stop Lamp Supply Voltage                  |
| C   | BK         | 1750        | Ground                                    |
| D   | BN         | 2509        | Left Rear Park Lamps Supply Voltage       |
| E   | L-GN       | 24          | Backup Lamp Supply Voltage                |



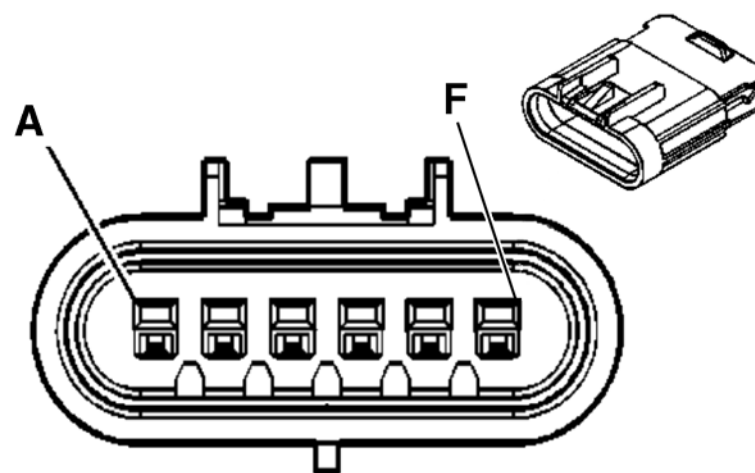
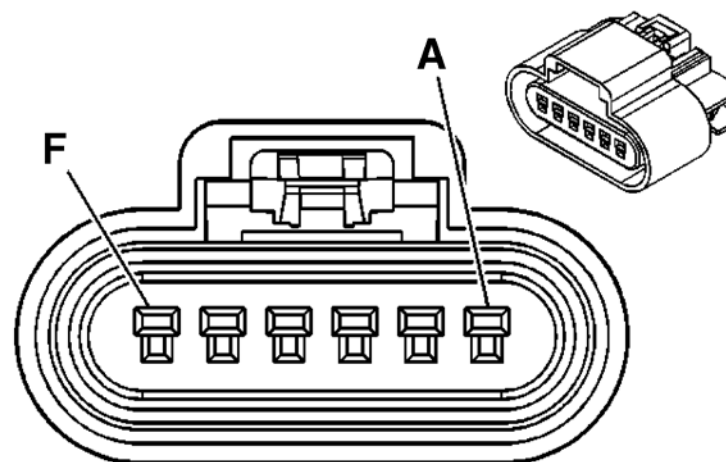
## Rear Lighting – Utility – C411 Chassis Harness to Left Rear Lamp Harness (Z75)

Connector: 6-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326829  
 Color: **BLK**  
 Service: 88953153

| Pin | Wire Color | Circuit No. | Function                                  |
|-----|------------|-------------|-------------------------------------------|
| A   | YE/BK      | ---         | Left Rear Turn Signal Lamp Supply Voltage |
| B   | YE         | ---         | Left Rear Stop/Turn Lamp Supply Voltage   |
|     | L-BU       | ---         | Stop Lamp Supply Voltage                  |
| C   | BK         | ---         | Ground                                    |
| D   | BN         | ---         | Left Rear Park Lamps Supply Voltage       |
| E   | L-GN       | ---         | Backup Lamp Supply Voltage                |
|     | OG         | ---         | Rear Fog Lamp Supply Voltage              |
| F   | YE         | ---         | Left Tail Lamp Outage Detection Signal    |

Connector: 6-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326833  
 Color: **BLK**  
 Service: 15326833

| Pin | Wire Color | Circuit No. | Function                                  |
|-----|------------|-------------|-------------------------------------------|
| A   | YE/BK      | 1334        | Left Rear Turn Signal Lamp Supply Voltage |
| B   | YE         | 18          | Left Rear Stop/Turn Lamp Supply Voltage   |
|     | L-BU       | 20          | Stop Lamp Supply Voltage                  |
| C   | BK         | 1750        | Ground                                    |
| D   | BN         | 2509        | Left Rear Park Lamps Supply Voltage       |
| E   | L-GN       | 24          | Backup Lamp Supply Voltage                |
|     | OG         | 122         | Rear Fog Lamp Supply Voltage              |
| F   | YE         | 5356        | Left Tail Lamp Outage Detection Signal    |



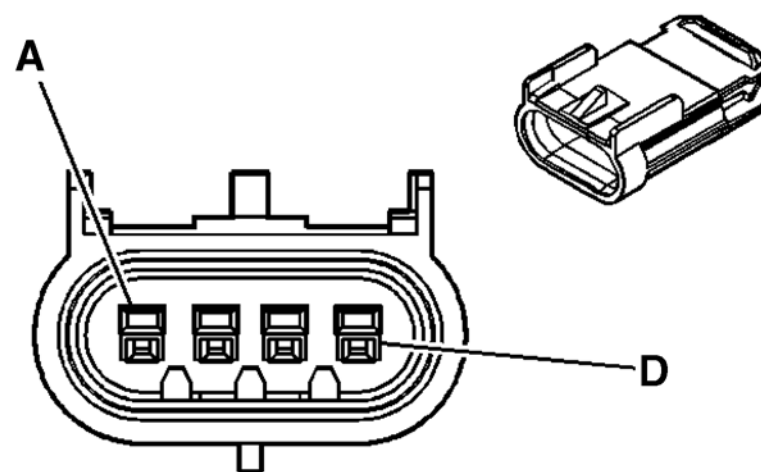
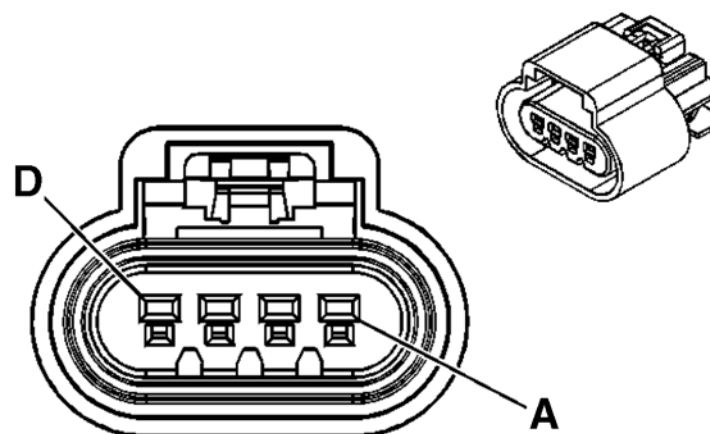
## Rear Lighting – Utility – C412 Chassis Harness to Right Rear Lamp Harness (Except E52/Z75)

Connector: 4-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326815  
 Color: **BLK**  
 Service: 15306396

| Pin | Wire Color | Circuit No. | Function                                 |
|-----|------------|-------------|------------------------------------------|
| A   | D-GN       | --          | Right Rear Stop/Turn Lamp Supply Voltage |
| B   | BK         | --          | Ground                                   |
| C   | BN         | --          | Right Rear Park Lamps Supply Voltage     |
| D   | L-GN       | --          | Backup Lamp Supply Voltage               |

Connector: 4-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326820  
 Color: **BLK**  
 Service: 15326820

| Pin | Wire Color | Circuit No. | Function                                 |
|-----|------------|-------------|------------------------------------------|
| A   | D-GN       | 19          | Right Rear Stop/Turn Lamp Supply Voltage |
| B   | BK         | 1750        | Ground                                   |
| C   | BN         | 2609        | Right Rear Park Lamps Supply Voltage     |
| D   | L-GN       | 24          | Backup Lamp Supply Voltage               |



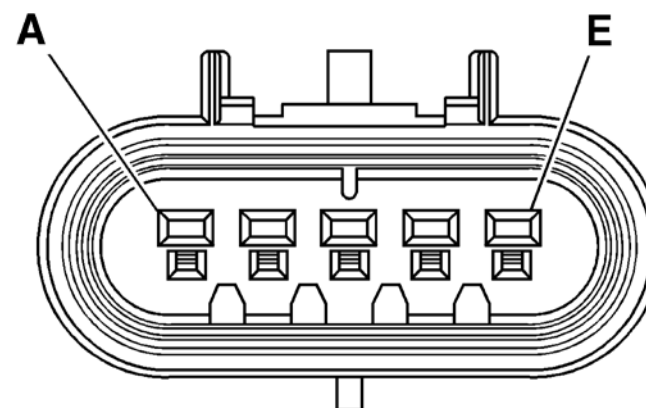
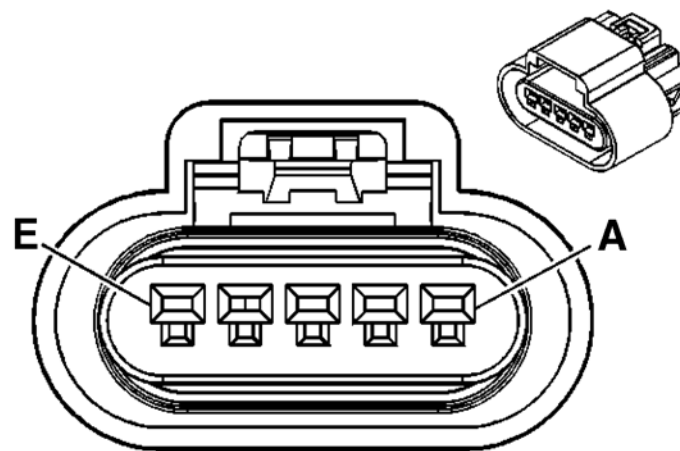
## ***Rear Lighting – Utility – C412 Chassis Harness to Right Rear Lamp Harness (E52 Except Z75)***

Connector: 5-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326822  
 Color: **BLK**  
 Service: 88987186

| Pin | Wire Color | Circuit No. | Function                                   |
|-----|------------|-------------|--------------------------------------------|
| A   | D-GN/WH    | --          | Right Rear Turn Signal Lamp Supply Voltage |
| B   | L-BU/BK    | --          | Stop Lamp Supply Voltage                   |
| C   | BK         | --          | Ground                                     |
| D   | BN         | --          | Right Rear Park Lamps Supply Voltage       |
| E   | L-GN       | --          | Backup Lamp Supply Voltage                 |

Connector: 5-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326827  
 Color: **BLK**  
 Service: 89046648

| Pin | Wire Color | Circuit No. | Function                                   |
|-----|------------|-------------|--------------------------------------------|
| A   | D-GN/WH    | 1335        | Right Rear Turn Signal Lamp Supply Voltage |
| B   | L-BU/BK    | 20          | Stop Lamp Supply Voltage                   |
| C   | BK         | 1750        | Ground                                     |
| D   | BN         | 2609        | Right Rear Park Lamps Supply Voltage       |
| E   | L-GN       | 24          | Backup Lamp Supply Voltage                 |



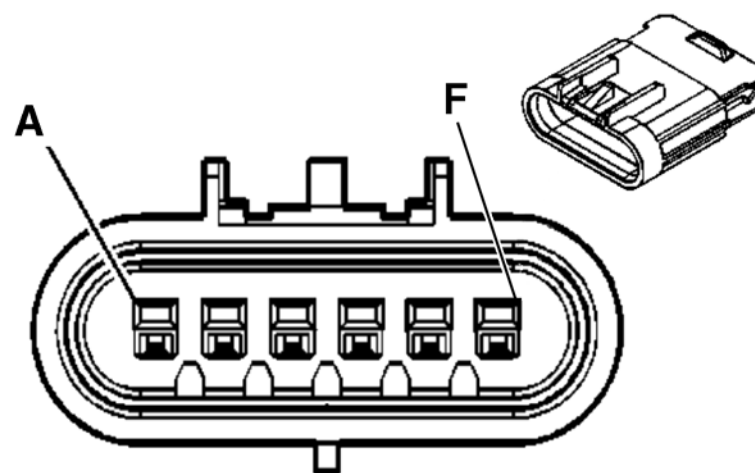
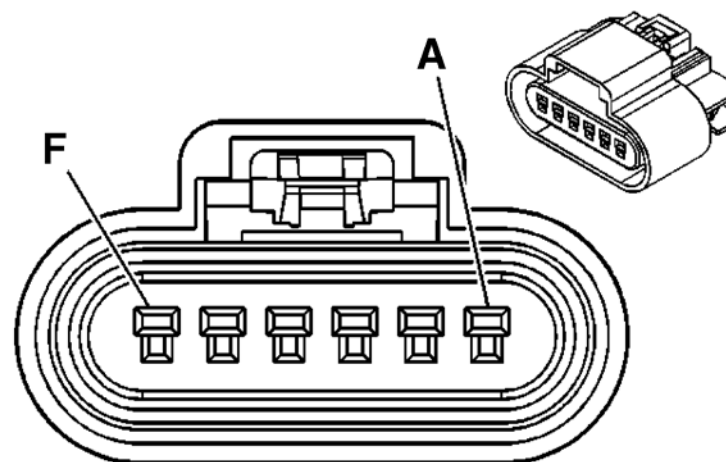
## Rear Lighting – Utility – C412 Chassis Harness to Right Rear Lamp Harness (Z75)

Connector: 6-Way F GT 150 Series, Sealed (BK)  
 O.E.M.: 15326829  
 Color: **BLK**  
 Service: 88953153

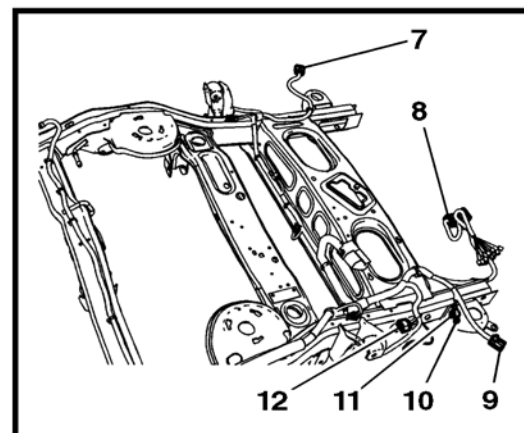
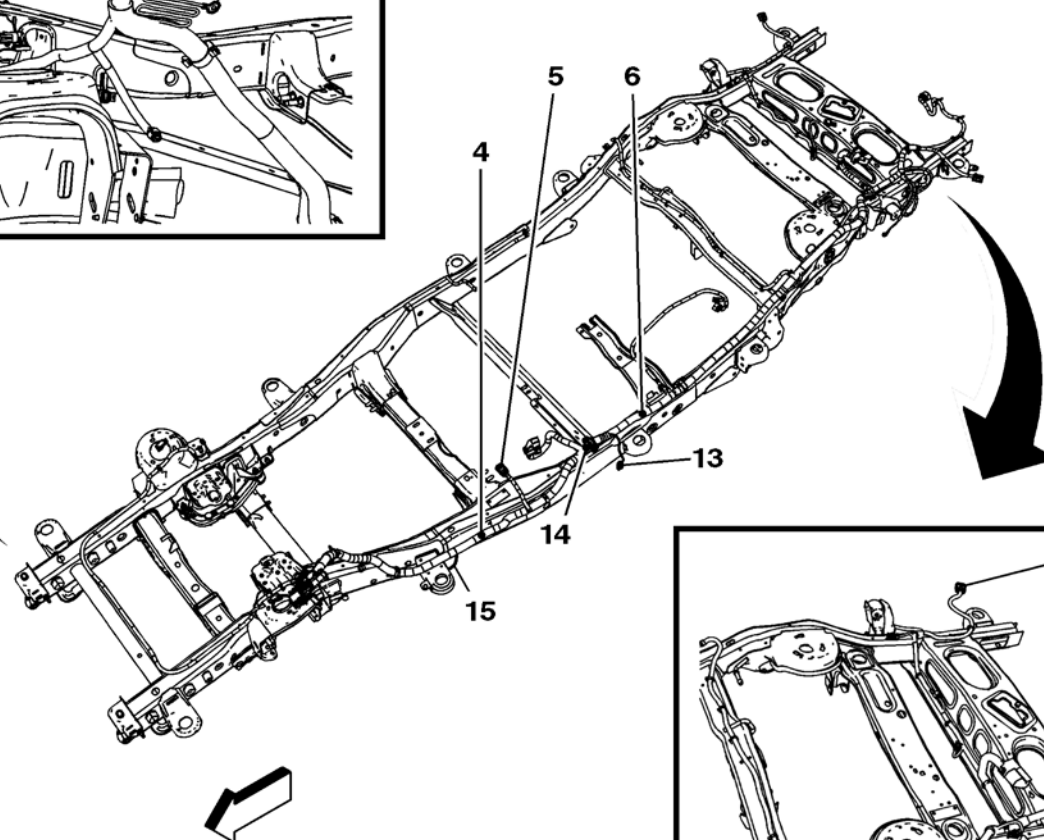
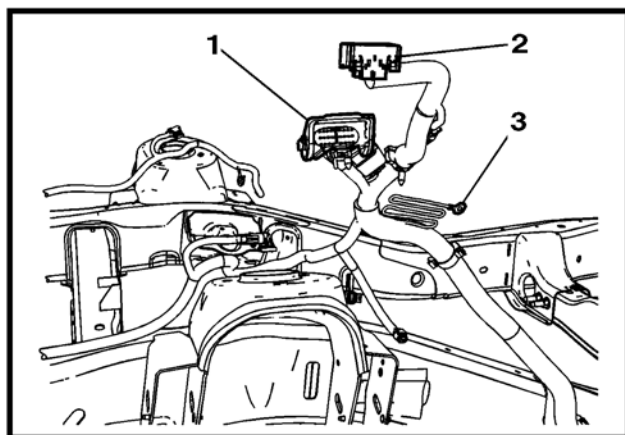
| Pin | Wire Color | Circuit No. | Function                                   |
|-----|------------|-------------|--------------------------------------------|
| A   | D-GN/WH    | --          | Right Rear Turn Signal Lamp Supply Voltage |
| B   | D-GN       | --          | Right Rear Stop/Turn Lamp Supply Voltage   |
|     | L-BU/BK    | --          | Stop Lamp Supply Voltage                   |
| C   | BK         | --          | Ground                                     |
| D   | BN         | --          | Right Rear Park Lamps Supply Voltage       |
| E   | L-GN       | --          | Backup Lamp Supply Voltage                 |
| F   | PU         | --          | Right Tail Lamp Outage Detection Signal    |

Connector: 6-Way M GT 150 Series, Sealed (BK)  
 O.E.M.: 15326833  
 Color: **BLK**  
 Service: 15326833

| Pin | Wire Color | Circuit No. | Function                                   |
|-----|------------|-------------|--------------------------------------------|
| A   | D-GN/WH    | 1335        | Right Rear Turn Signal Lamp Supply Voltage |
| B   | D-GN       | 19          | Right Rear Stop/Turn Lamp Supply Voltage   |
|     | L-BU/BK    | 20          | Stop Lamp Supply Voltage                   |
| C   | BK         | 1750        | Ground                                     |
| D   | BN         | 2609        | Right Rear Park Lamps Supply Voltage       |
| E   | L-GN       | 24          | Backup Lamp Supply Voltage                 |
| F   | PU         | 5357        | Right Tail Lamp Outage Detection Signal    |

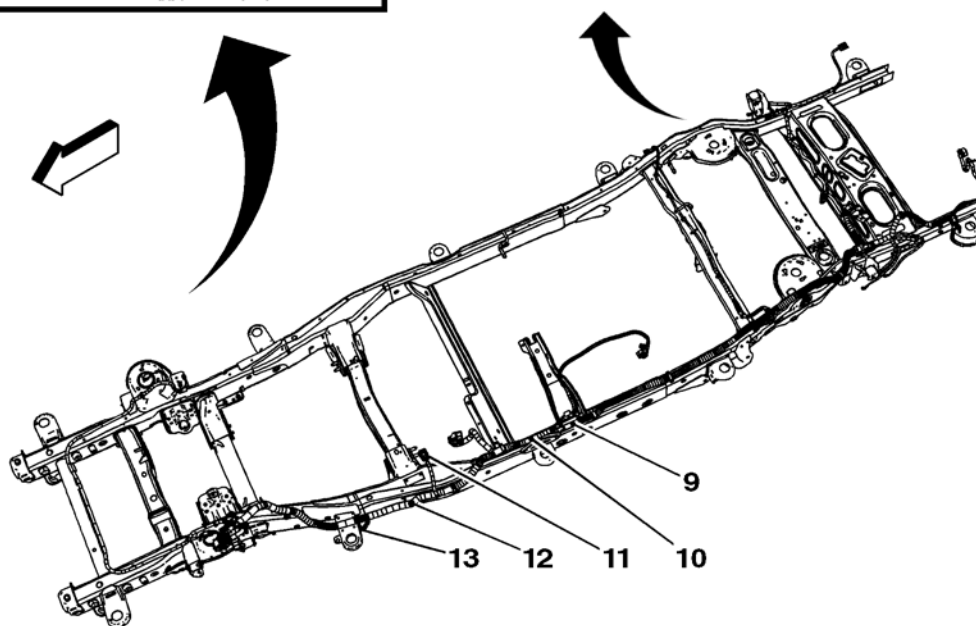
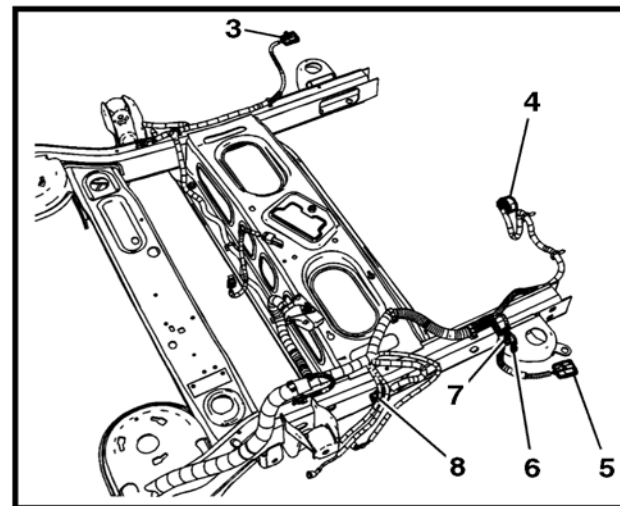
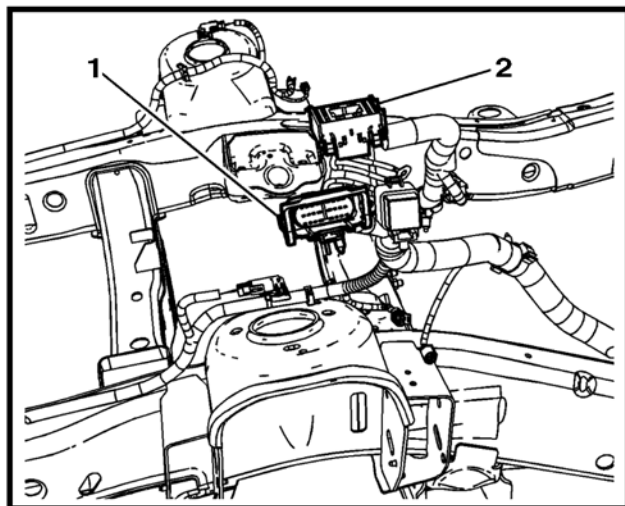


## Rear Lighting – Utility – C411 and C412 Location – Short Wheel Base



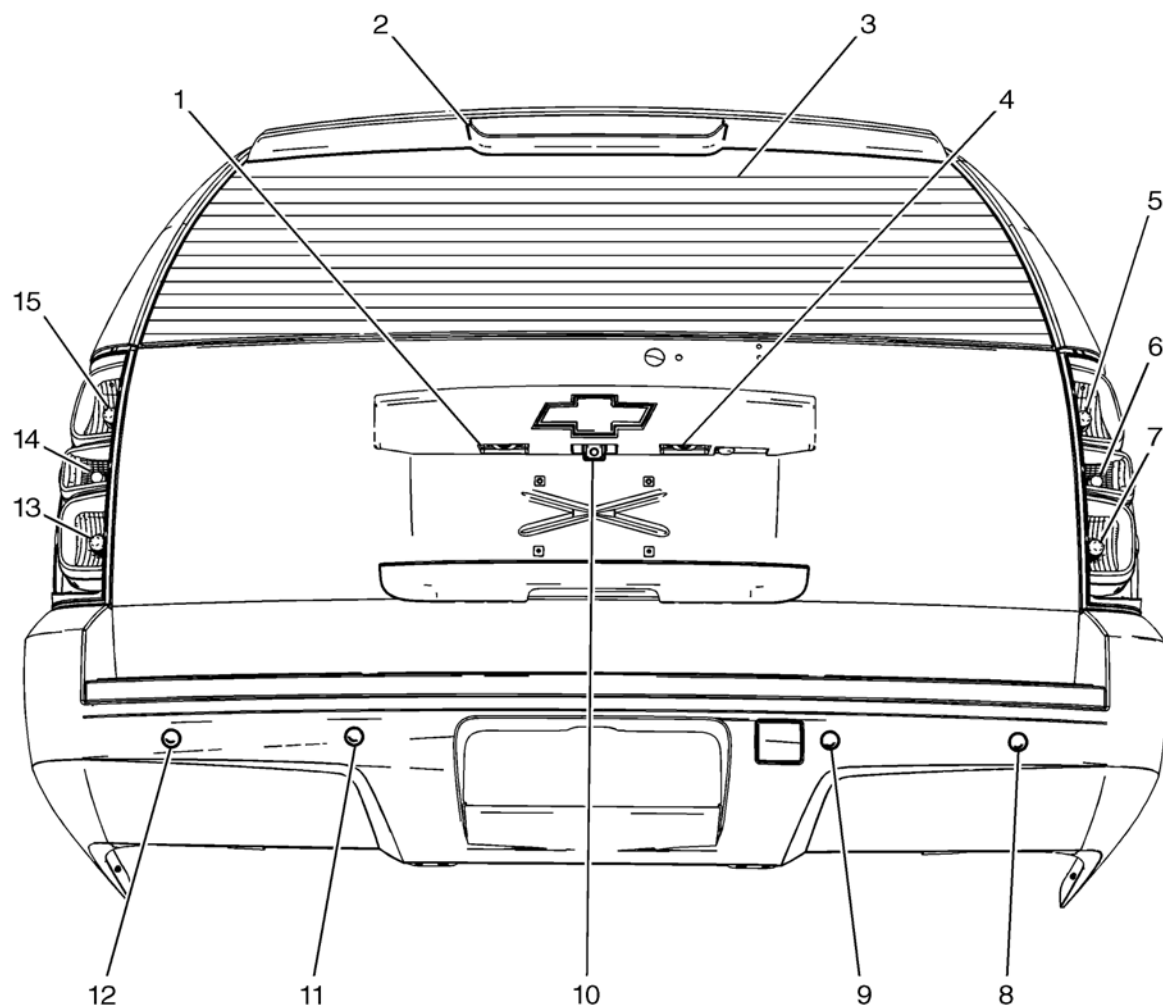
- (1) C115
- (2) Fuse Block –  
Underhood C3
- (3) Stud #1 Terminal
- (4) S300
- (5) C300
- (6) S331
- (7) C412**
- (8) Trailer Connector
- (9) C411**
- (10) G400
- (11) G401
- (12) C400
- (13) G305
- (14) S301 (Z55 and Z95)
- (15) G300

## Rear Lighting – Utility – C411 and C412 Location – Long Wheel Base



- (1) C115
- (2) Fuse Block –  
Underhood C3
- (3) **C412**
- (4) Trailer Connector
- (5) **C411**
- (6) G400
- (7) G401
- (8) C400 (Z55)
- (9) S331
- (10) S301 (Z55 and Z95)
- (11) C300
- (12) S300
- (13) G300

## Rear Lighting – Utility – Rear of the Vehicle (X88 w/E52)

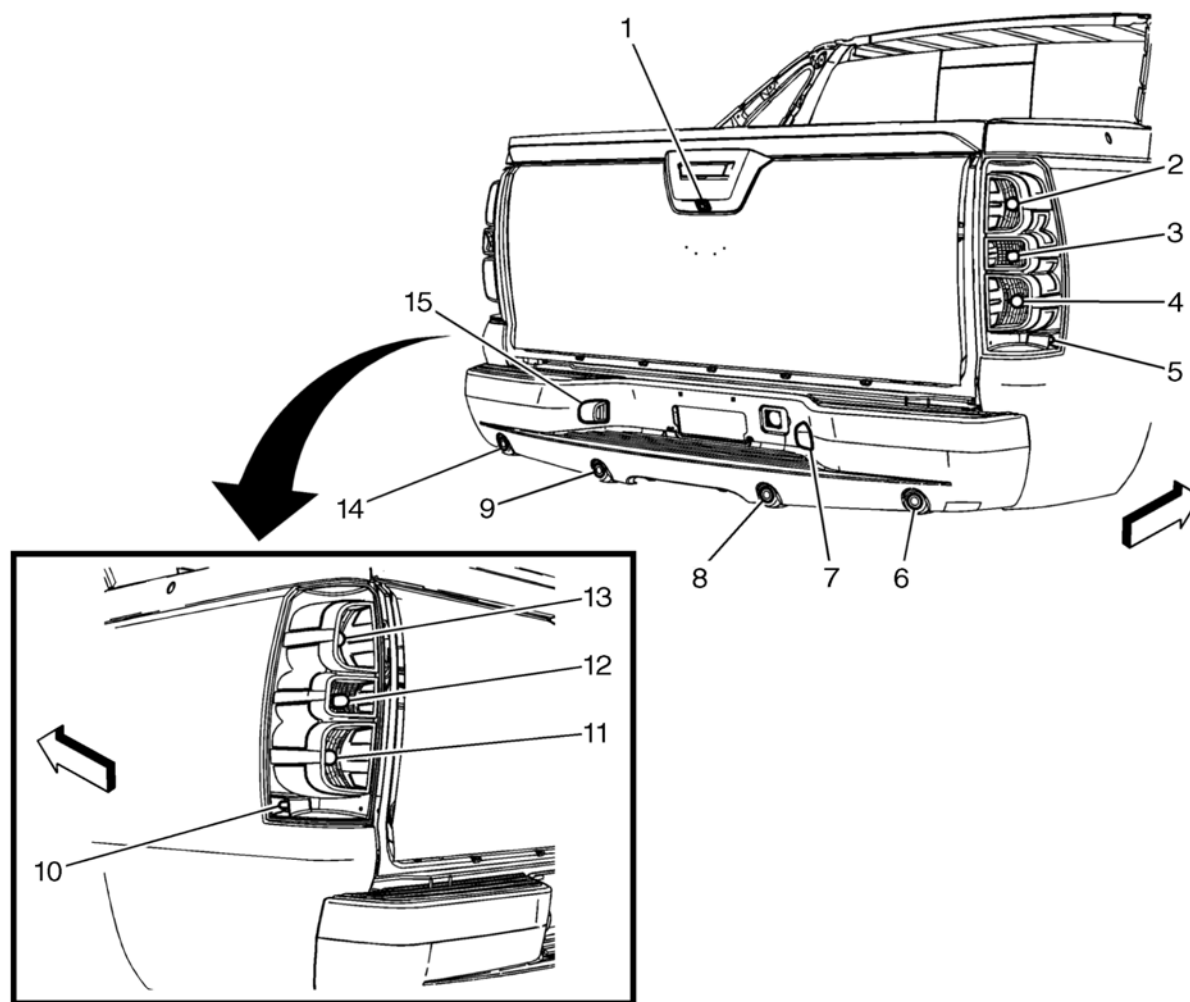


- (1) License Lamp – Left
- (2) Center High Mounted Stop Lamp (CHMSL)
- (3) Defogger Grid
- (4) License Lamp – Right
- (5) Tail/Stop Lamp – Right

- (6) Backup Lamp – Right
- (7) Tail/Turn Signal Lamp – Right
- (8) Object Sensor – RR Corner
- (9) Object Sensor – RR Middle
- (10) Rearview Camera (UVC) (E52)

- (11) Object Sensor – LR Middle
- (12) Object Sensor – LR Corner
- (13) Tail/Turn Signal Lamp – Left
- (14) Backup Lamp – Left
- (15) Tail/Stop Lamp – Left

## Rear Lighting – Utility – Rear of the Vehicle (X88 Except E52)



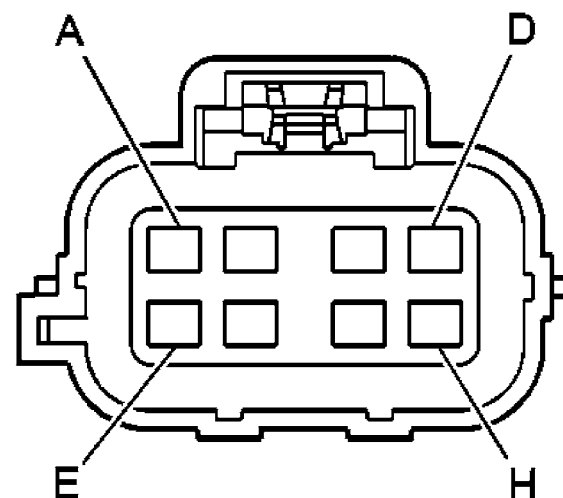
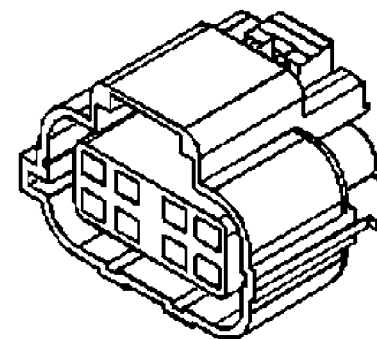
- (1) Rearview Camera (UVC)
- (2) Tail/Stop Lamp – Right
- (3) Backup Lamp – Right
- (4) Tail/Turn Signal Lamp – Right
- (5) Marker Lamp – RR

- (6) Object Sensor – RR Corner
- (7) License Lamp – Right
- (8) Object Sensor – RR Middle
- (9) Object Sensor – LR Middle
- (10) Marker Lamp – LR

- (11) Tail/Turn Signal Lamp – Left
- (12) Backup Lamp – Left
- (13) Tail/Stop Lamp Left
- (14) Object Sensor – LR Corner
- (15) License Lamp – Left

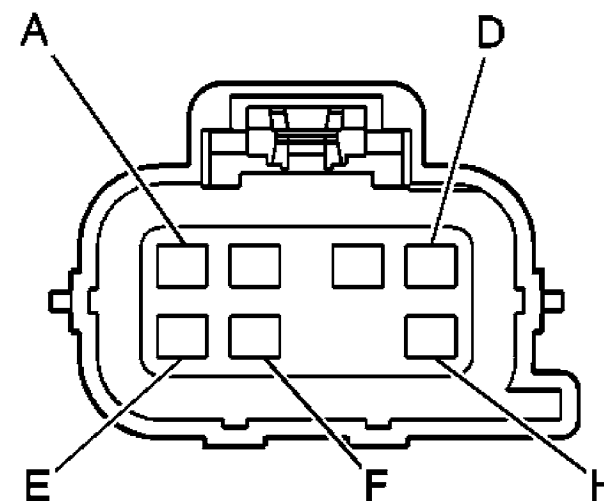
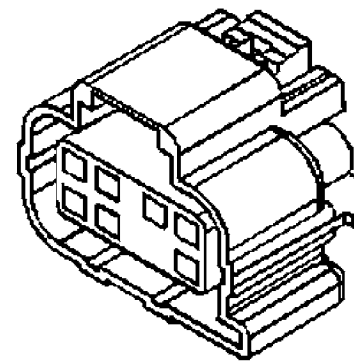
## Rear Lighting — Pickup & Chassis Cab Junction Block C-1 – Rear Chassis Harness Connector

| Connector          | 8-Way F Global Tech 280 Series (BLU) |             |                                             |
|--------------------|--------------------------------------|-------------|---------------------------------------------|
| Typical Connector  | 15305595 (F)                         |             |                                             |
| Color              | <b>BLU</b>                           |             |                                             |
| Typical Terminal   | 15304716                             |             |                                             |
| Typical Cable Seal | 15366061                             |             |                                             |
| Pin                | Wire Color                           | Circuit No. | Function                                    |
| A                  | YEL                                  | 18          | Left Stop/Turn Signal Lamps Supply Voltage  |
| B                  | BLK                                  | 2150        | Ground                                      |
| C                  | LT GRN                               | 24          | Backup Lamp Supply Voltage                  |
| D                  | BRN/WHT                              | 2609        | Right Rear Park Lamps Supply Voltage        |
| E                  | BLK                                  | 1750        | Ground                                      |
| F                  | — —                                  | — —         | Not Used                                    |
| G                  | BRN                                  | 2509        | Left Rear Park Lamps Supply Voltage         |
| H                  | DK GRN                               | 19          | Right Stop/Turn Signal Lamps Supply Voltage |



## Rear Lighting – Pickup & Chassis Cab Junction Block C-2 – Left Tail Lamp Connector

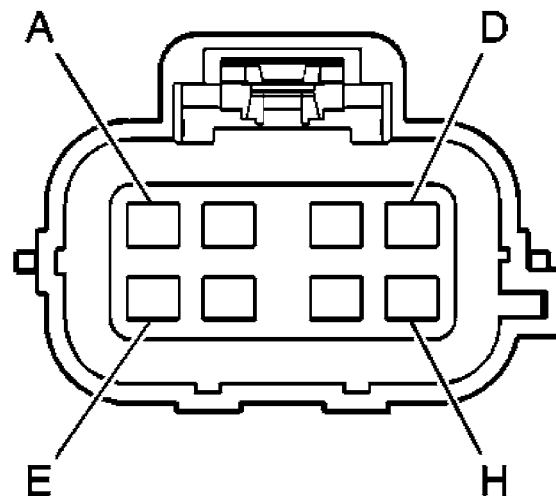
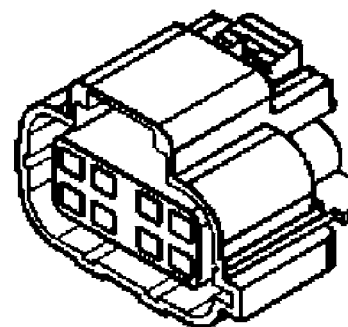
| Connector          | 7-Way F Global Tech 280 Series (GRY) |             |                                            |
|--------------------|--------------------------------------|-------------|--------------------------------------------|
| Typical Connector  | 15305596 (F)                         |             |                                            |
| Color              | <b>GRY</b>                           |             |                                            |
| Typical Terminal   | 15304716                             |             |                                            |
| Typical Cable Seal | 15366061                             |             |                                            |
| Pin                | Wire Color                           | Circuit No. | Function                                   |
| A                  | --                                   | --          | Not Used                                   |
| B                  | --                                   | --          | Not Used                                   |
| C                  | BLK                                  | 1750        | Ground                                     |
| D                  | --                                   | --          | Not Used                                   |
| E                  | BRN                                  | 2509        | Left Rear Park Lamps Supply Voltage        |
| F                  | LT GRN                               | 24          | Backup Lamp Supply Voltage                 |
| H                  | YEL                                  | 18          | Left Stop/Turn Signal Lamps Supply Voltage |



## Rear Lighting – Pickup & Chassis Cab Junction Block C-3 – License Plate Connector

|                    |                                      |
|--------------------|--------------------------------------|
| Connector          | 8-Way F Global Tech 280 Series (BRN) |
| Typical Connector  | 15305599 (F)                         |
| Color              | <b>BRN</b>                           |
| Typical Terminal   | 15304716                             |
| Typical Cable Seal | 15366061                             |

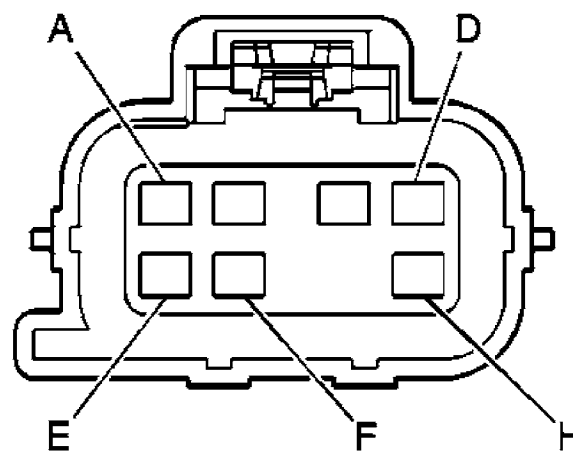
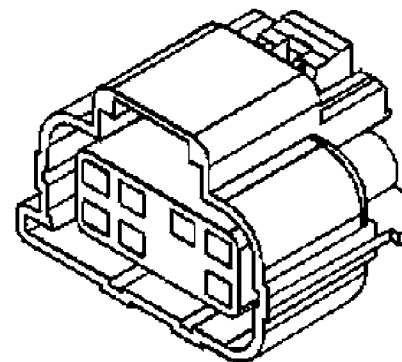
| Pin | Wire Color | Circuit No. | Function                             |
|-----|------------|-------------|--------------------------------------|
| A   | BRN/WHT    | 2609        | Right Rear Park Lamps Supply Voltage |
| B   | BRN/WHT    | 2609        | Right Rear Park Lamps Supply Voltage |
| C   | BLK        | 1750        | Ground                               |
| D   | BLK        | 1750        | Ground                               |
| E   | BLK        | 1750        | Ground                               |
| F   | BRN        | 2509        | Left Rear Park Lamps Supply Voltage  |
| G   | BRN        | 2509        | Left Rear Park Lamps Supply Voltage  |
| H   | BLK        | 1750        | Ground                               |



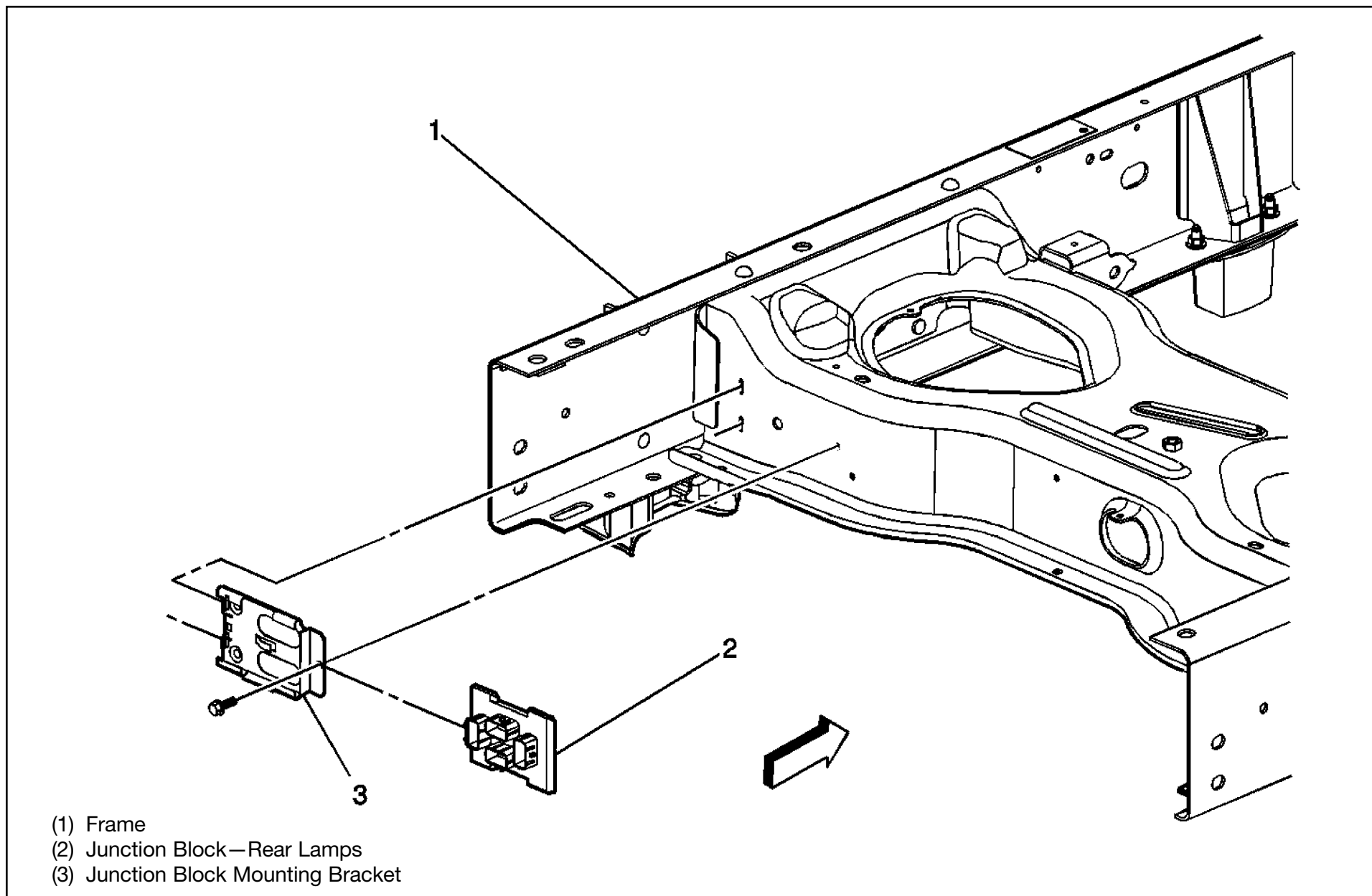
## Rear Lighting – Pickup & Chassis Cab Junction Block C-4 – Right Tail Lamp Connector

|                    |                                      |
|--------------------|--------------------------------------|
| Connector          | 7-Way F Global Tech 280 Series (BLK) |
| Typical Connector  | 15305597 (F)                         |
| Color              | <b>BLK</b>                           |
| Typical Terminal   | 15304716                             |
| Typical Cable Seal | 15366061                             |

| Pin | Wire Color | Circuit No. | Function                                    |
|-----|------------|-------------|---------------------------------------------|
| A   | BLK        | 2150        | Ground                                      |
| B   | BRN/WHT    | 2609        | Right Rear Park Lamps Supply Voltage        |
| C   | --         | --          | Not Used                                    |
| D   | --         | --          | Not Used                                    |
| E   | LT GRN     | 24          | Backup Lamp Supply Voltage                  |
| F   | DK GRN     | 19          | Right Stop/Turn Signal Lamps Supply Voltage |
| H   | --         | --          | Not Used                                    |

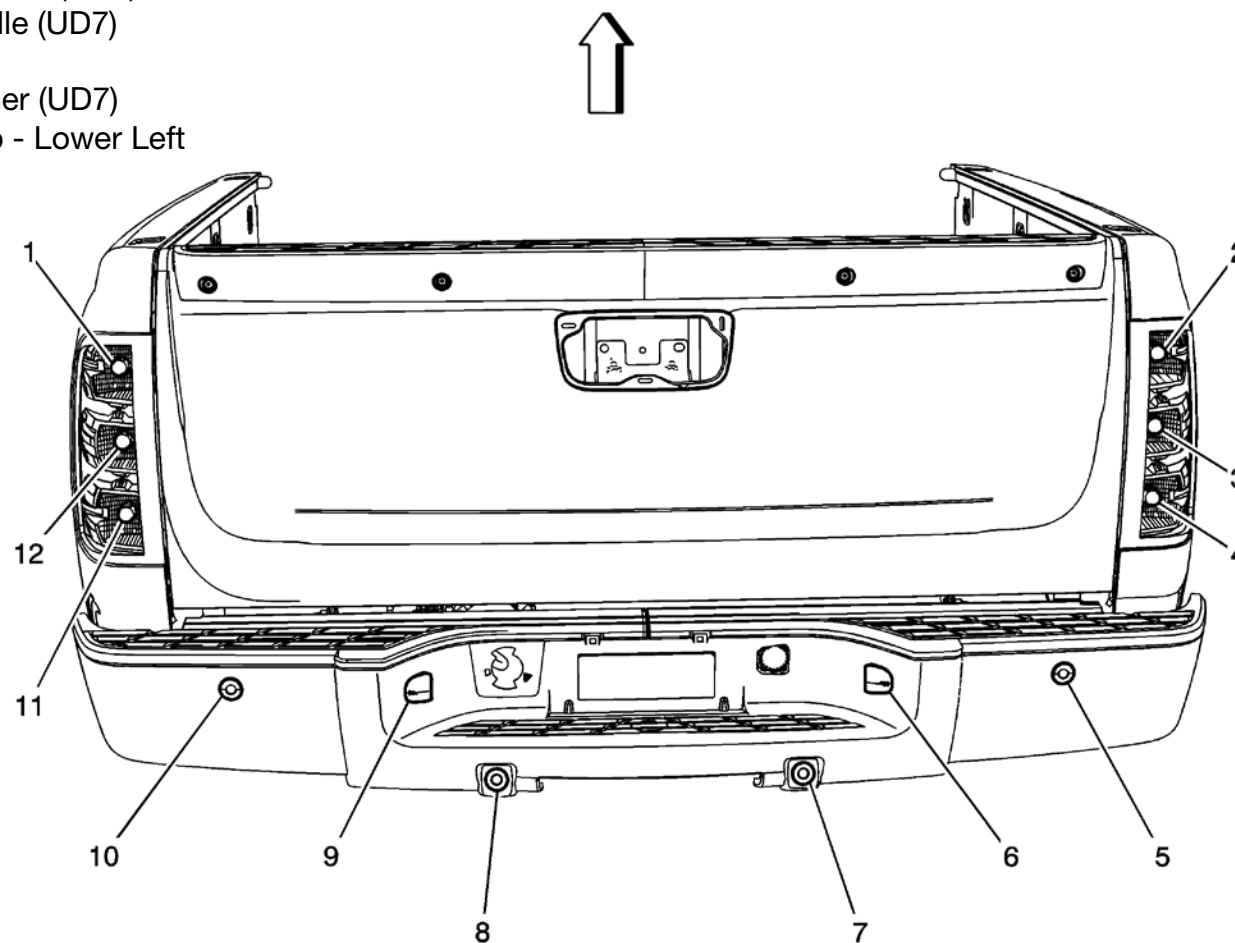


## Rear Lighting – Pickup & Chassis Cab – Junction Block Location

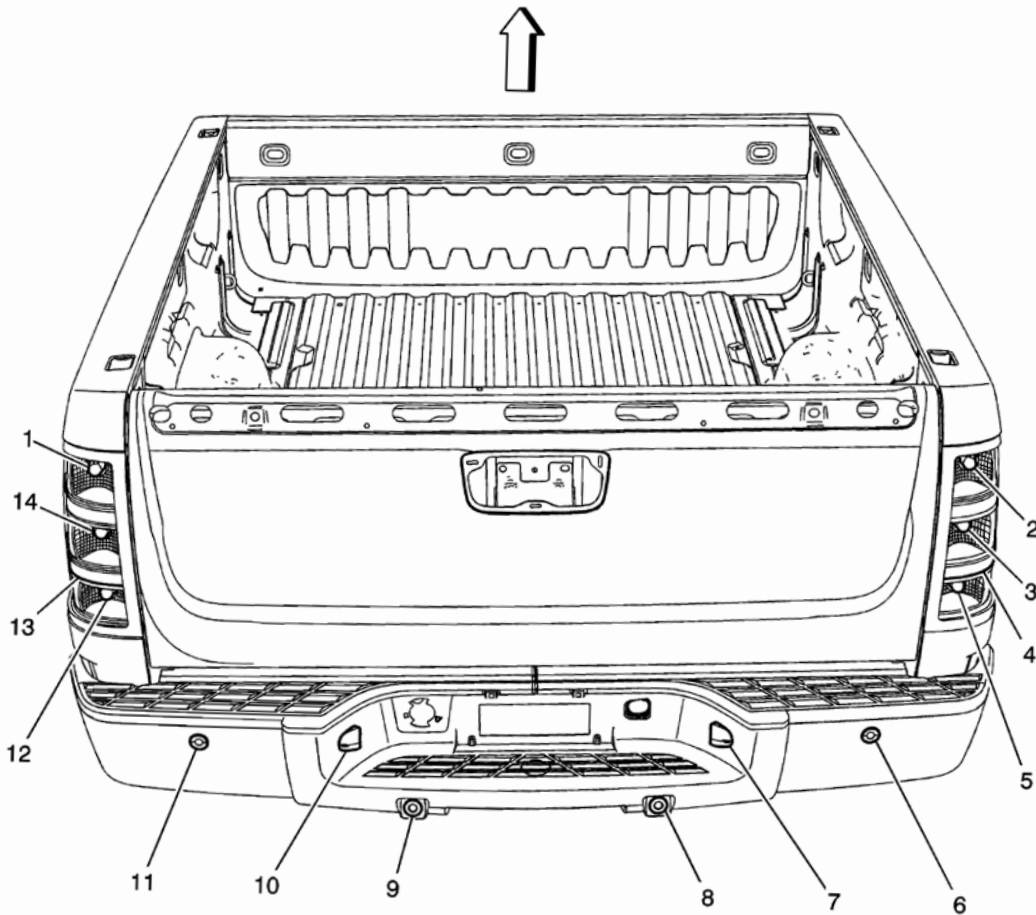


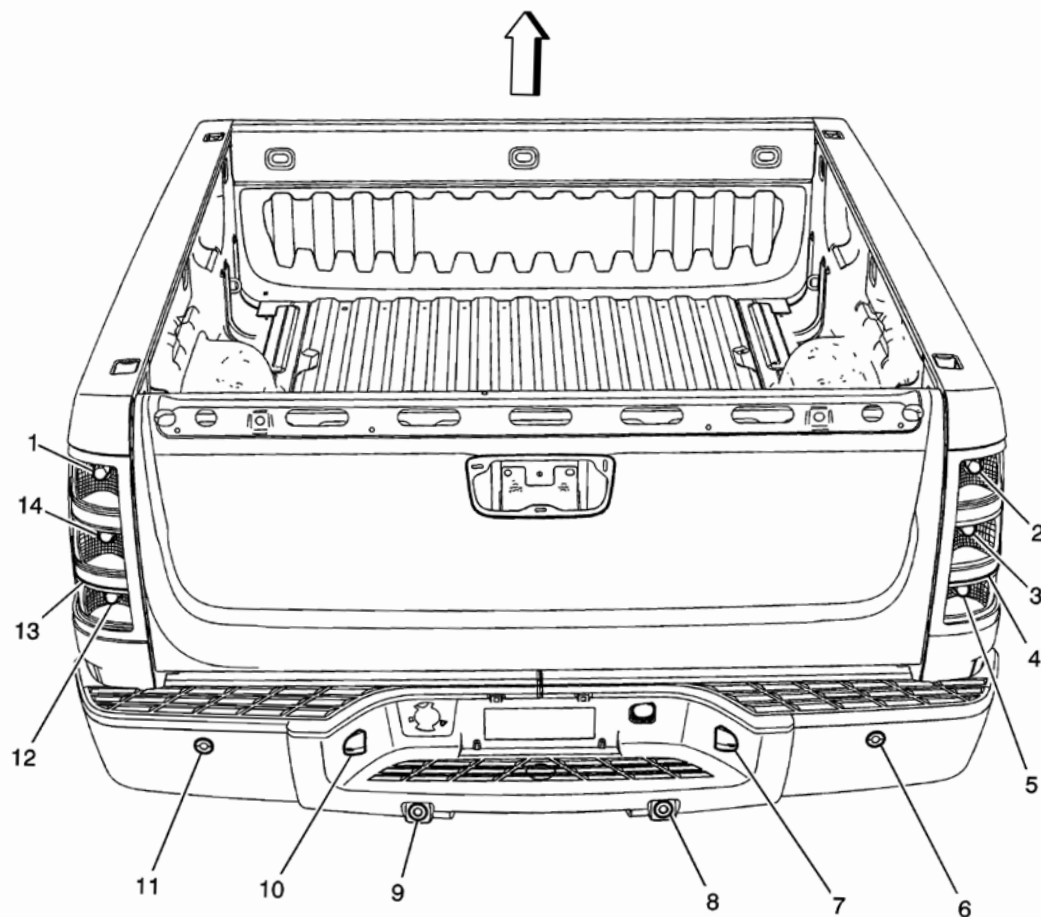
## Rear Lighting – Pickup & Chassis-Cab – Rear of the Vehicle – Tail Lamp (X88)

- (1) Tail/Stop and Turn Signal Lamp - Upper Left
- (2) Tail/Stop and Turn Signal Lamp - Upper Right
- (3) Backup Lamp - Right Rear
- (4) Tail/Stop and Turn Signal Lamp - Lower Right
- (5) Object Sensor - Right Rear Corner (UD7)
- (6) License Lamp - Right
- (7) Object Sensor - Right Rear Middle (UD7)
- (8) Object Sensor - Left Rear Middle (UD7)
- (9) License Lamp - Left
- (10) Object Sensor - Left Rear Corner (UD7)
- (11) Tail/Stop and Turn Signal Lamp - Lower Left
- (12) Backup Lamp - Left Rear



## Rear Lighting – Pickup & Chassis-Cab – Rear of the Vehicle – Tail Lamp (Z88)

- 
- (1) Tail/Stop and Turn Signal Lamp - Upper Left  
(2) Tail/Stop and Turn Signal Lamp - Upper Right  
(3) Tail/Stop and Turn Signal Lamp - Lower Right  
(4) Marker Lamp - Right Rear  
(5) Backup Lamp - Right Rear  
(6) Object Sensor - Right Rear Corner (UD7)  
(7) License Lamp - Right  
(8) Object Sensor - Right Rear Middle (UD7)  
(9) Object Sensor - Left Rear Middle (UD7)  
(10) License Lamp - Left  
(11) Object Sensor - Left Rear Corner (UD7)  
(12) Backup Lamp - Left Rear  
(13) Marker Lamp - Left Rear  
(14) Tail/Stop and Turn Signal Lamp - Lower Left



## Trailer Connector

Connector: 7-Way F Metri-Pack 280 630 Series, Sealed  
OEM: 15354653  
Color: **BLK**  
Service: 15306164

### **Pins: B**

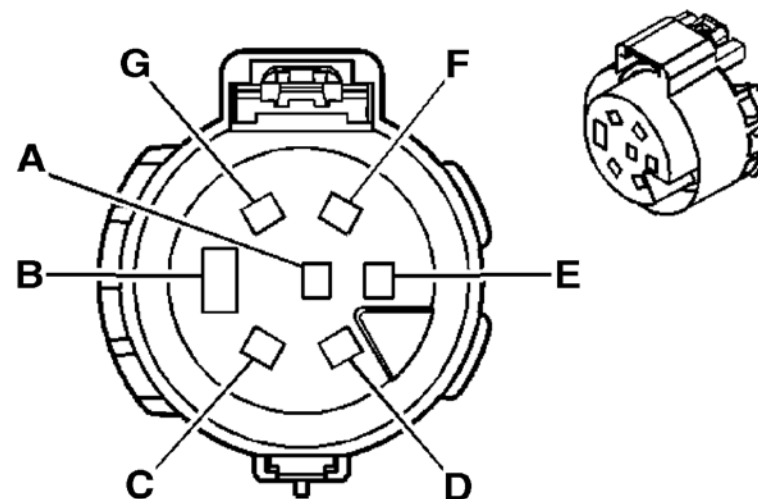
Terminal/Tray: 12052456/3  
Core/Insulation Crimp: TBD  
Release Tool/Test Probe: TBD

### **Pins: A, D, F, G**

Terminal/Tray: 12110847/4  
Core/Insulation Crimp: C/5  
Release Tool/Test Probe: 15315247/J-35616-4A (PU)

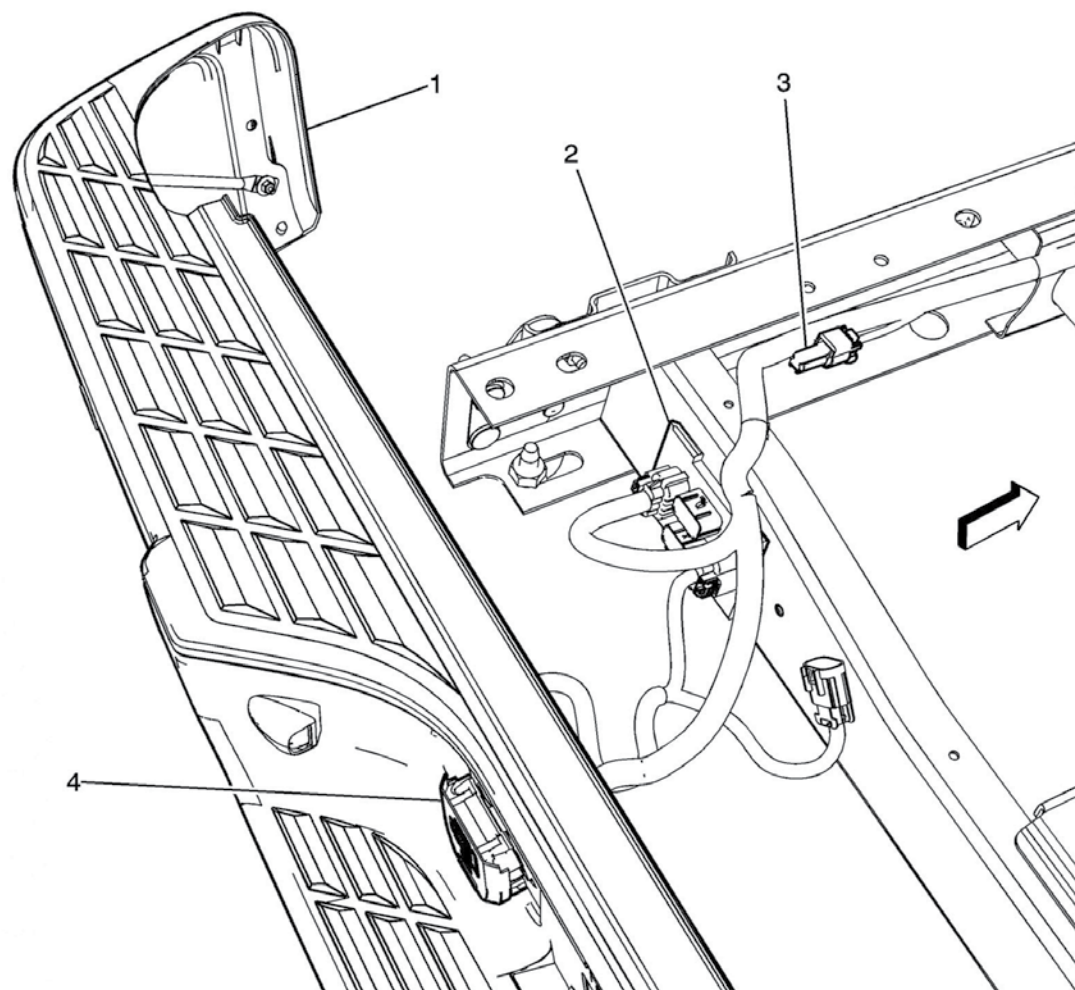
### **Pins: C, E**

Terminal/Tray: 12110845/4  
Core/Insulation Crimp: F/5  
Release Tool/Test Probe: 15315247/J-35616-4A (PU)



| Pin | Wire Color | Circuit No. | Function                                         |
|-----|------------|-------------|--------------------------------------------------|
| A   | L-GN       | 1624        | Trailer Backup Lamp Supply Voltage               |
| B   | WH         | 22          | Ground                                           |
| C   | D-BU       | 47          | Trailer Auxiliary Supply Voltage                 |
| D   | D-GN       | 1619        | Trailer Right Rear Turn/Stop Lamp Supply Voltage |
| E   | RD/BK      | 742         | Battery Positive Voltage                         |
| F   | BN         | 2109        | Trailer Park Lamp Supply Voltage                 |
| G   | YE         | 1618        | Trailer Left Rear Turn/Stop Lamp Supply Voltage  |

## Trailer Connector Location – Pickup & Chassis-Cab



- (1) Rear Bumper
- (2) Junction Block - Rear Lamps
- (3) Terminator Resistor
- (4) **Trailer Connector (UY7)**

## **Special Applications – Tail Lamp Wiring for Pickup Box Removal**

### **REAR JUNCTION BLOCK**

The tail lamp wiring on the All New C/K is routed to a junction block located at the rear of the vehicle. This junction block interfaces with the rear chassis harness and breaks out the license lamp, left turn lamp and right turn lamp connections. A schematic diagram of the Rear Junction Block and tail lamp circuits is shown on pages 3 and 4. On trucks without the Pickup Box Delete (ZW9) option, this junction block is attached to the underside of the box and therefore must be relocated when removing the box. On trucks with ZW9, this junction block is attached to the left frame rail.

The parts required to relocate the Rear Junction Block to left frame are as follows:

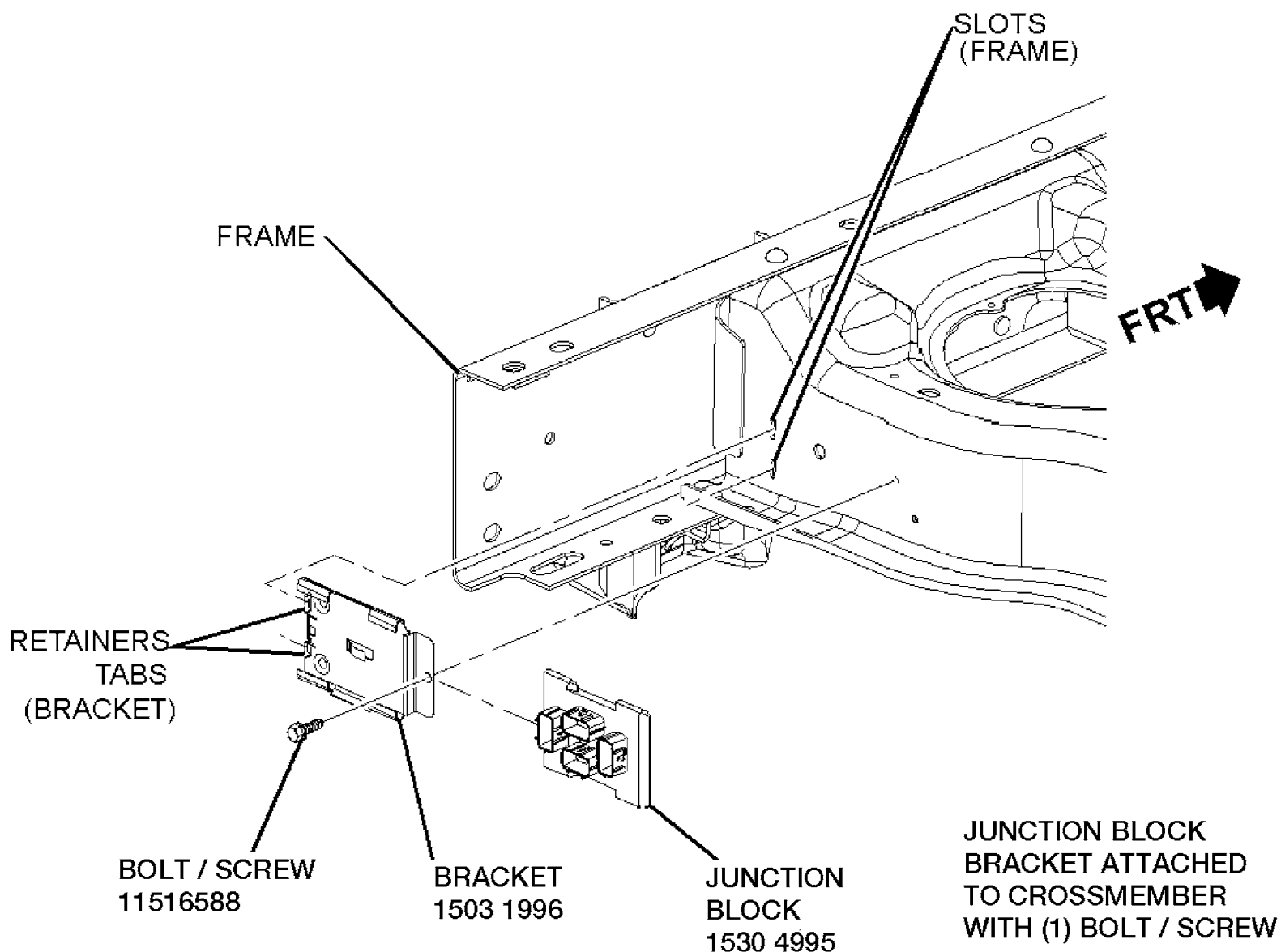
- |                             |                       |
|-----------------------------|-----------------------|
| – Junction Block            | Part Number: 15304995 |
| – Junction Block Bracket    | Part Number: 15031996 |
| – Bolt/Screw (two required) | Part Number: 11516885 |

### **REAR TAIL LAMPS AND LICENSE PLATE LAMP**

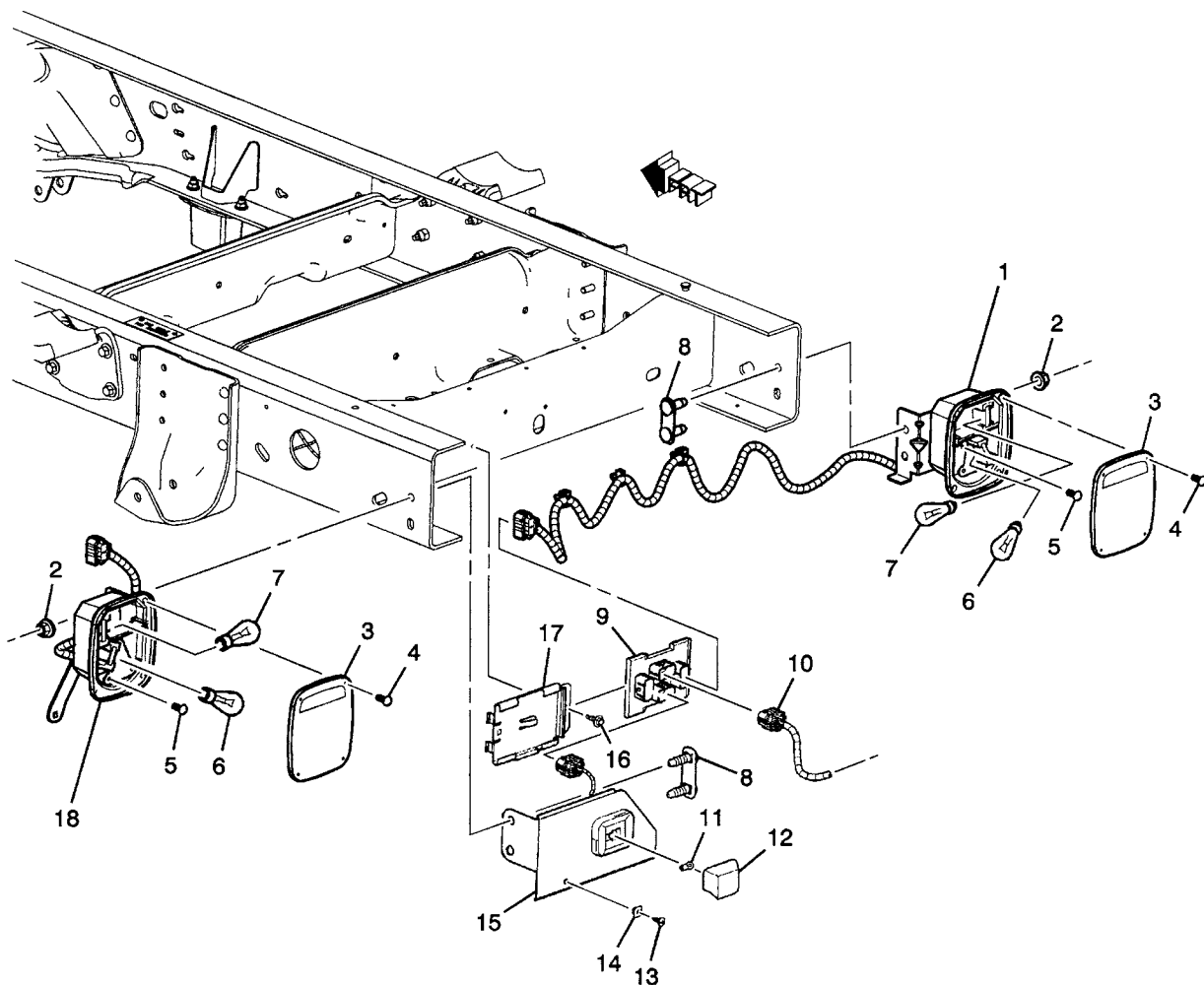
The parts required to install the rear tail lamps and license plate lamp assembly are as follows:

- |                                      |                               |
|--------------------------------------|-------------------------------|
| – Tail Lamp Assembly – LH            | Service Part Number: 25775557 |
| – Tail lamp Assembly – RH            | Service Part Number: 25775558 |
| – Rear License Plate Lamp Assembly   | Service Part Number: 15154884 |
| – Stud/plate Assembly (two required) | Service Part Number: 11609856 |
| – Nut (four required)                | Service Part Number: 03537772 |

## Special Applications – Rear Junction Block / Bracket Installation – Chassis Cab and Box Delete (ZW9) Trucks

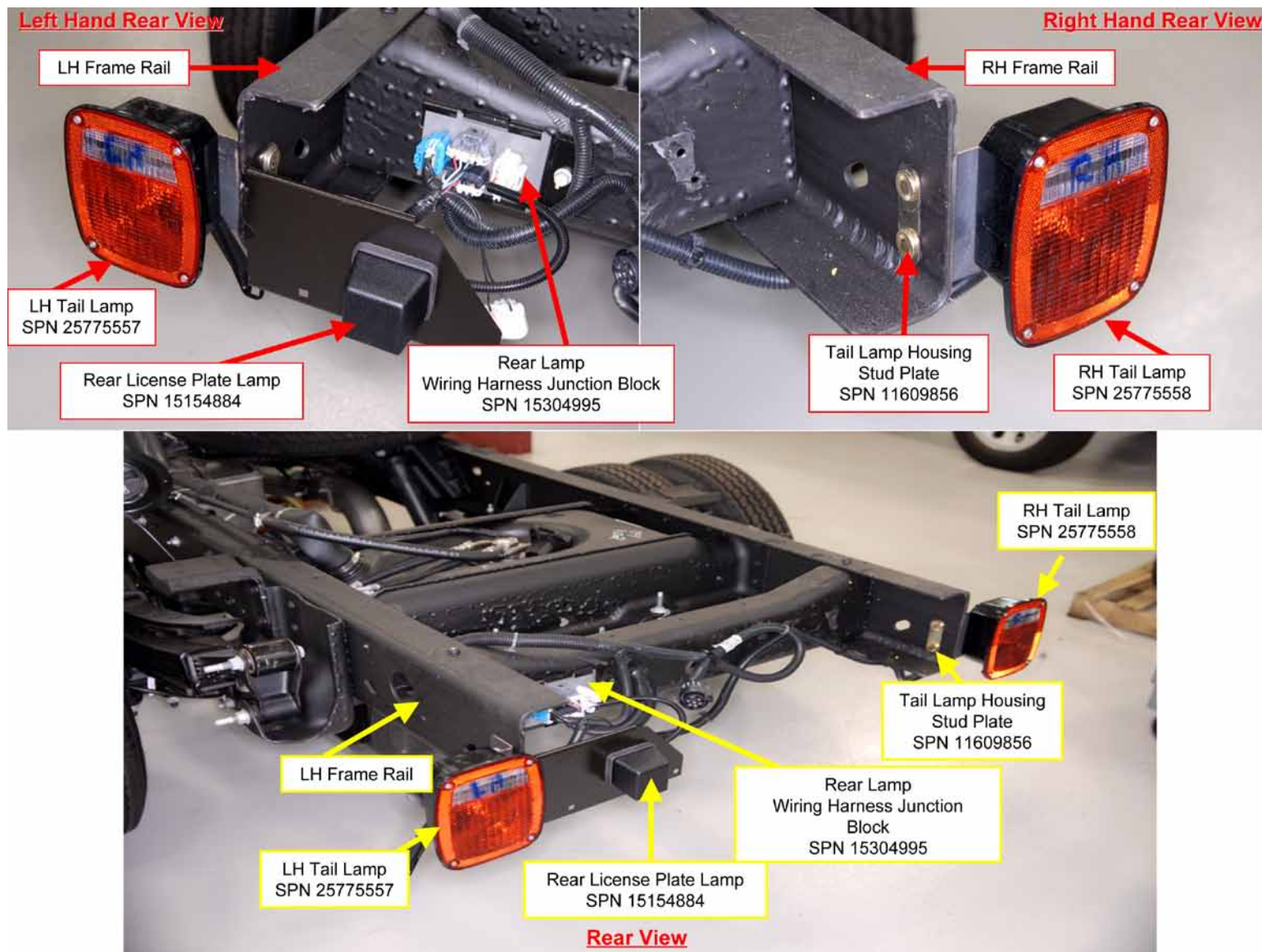


## Special Applications – Tail Lamps / Rear Junction Block – Chassis Cab and Box Delete (ZW9) Trucks



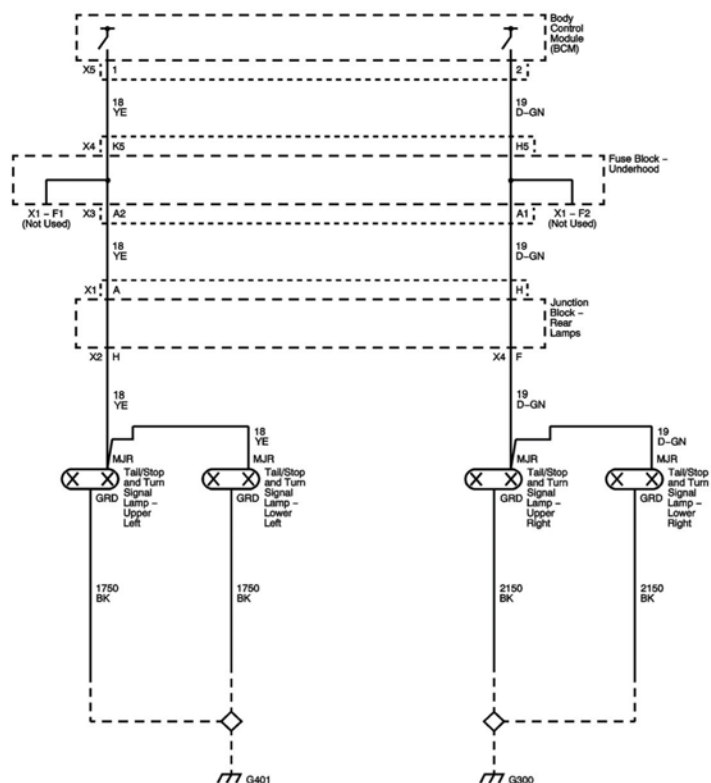
| Item | Part Number | Part Description                                       |
|------|-------------|--------------------------------------------------------|
| 1    | 25775558    | Lamp, Tail - RH                                        |
| 2    | 03537772    | Nut, Tail Lamp                                         |
| 3    | 25806796    | Lens, Tail Lamp                                        |
| 4    | 11570316    | Screw, Tail Lamp Lens                                  |
| 5    | 11570317    | Screw, Tail Lamp Bracket                               |
| 6    | 09428902    | Bulb, Tail/Stop/Turn – 1157                            |
| 7    | 09417866    | Bulb, Backup – 1156                                    |
| 8    | 11609856    | Plate, Tail Lamp Housing Stud                          |
| 9    | 15304995    | Block, Rear Lamp Wiring Harness Junction               |
| 10   | --          | Harness, Chassis Wiring                                |
| 11   | 09421777    | Bulb, License Plate – 97                               |
| 12   | NS          | Cover, Rear License Plate Lamp                         |
| 13   | 09423101    | Screw, License Plate                                   |
| 14   | 03907444    | Nut, Push In                                           |
| 15   | 15154884    | Lamp, Rear License Plate                               |
| 16   | 11516885    | Screw, Rear Lamp Wiring Harness Junction Block Bracket |
| 17   | 15031996    | Bracket, Rear Lamp Wiring Harness Junction Block       |
| 18   | 25775557    | Lamp, Tail – LH                                        |

## Special Applications – Tail Lamps/Rear Junction Block – Chassis Cab and Box Delete (ZW9) Trucks



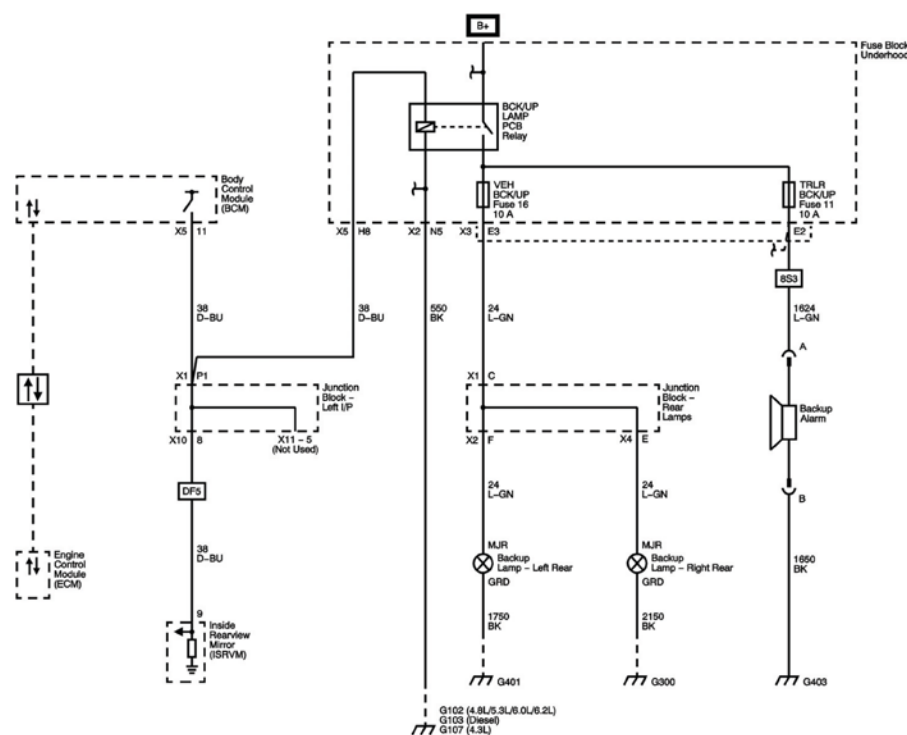
## Special Applications – Schematics – Rear Lamps – Chassis Cab and Box Delete (ZW9) Trucks

### Rear Stop/Turn Signal Lamps



#1914955

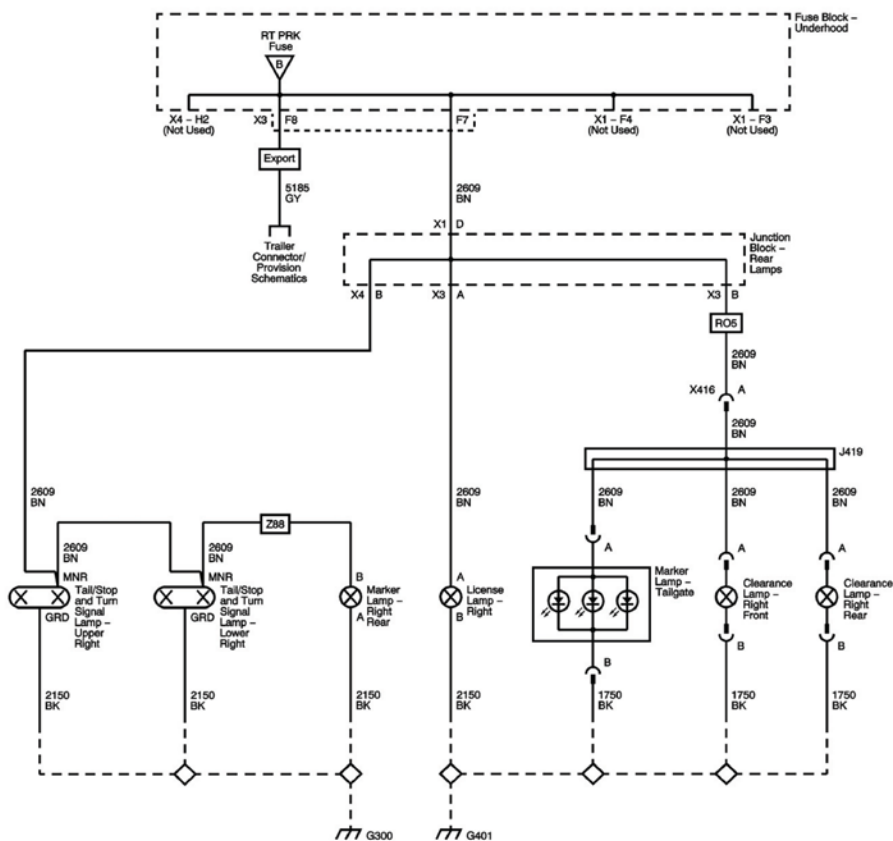
### Backup Lamps and Backup Alarm



#1914964

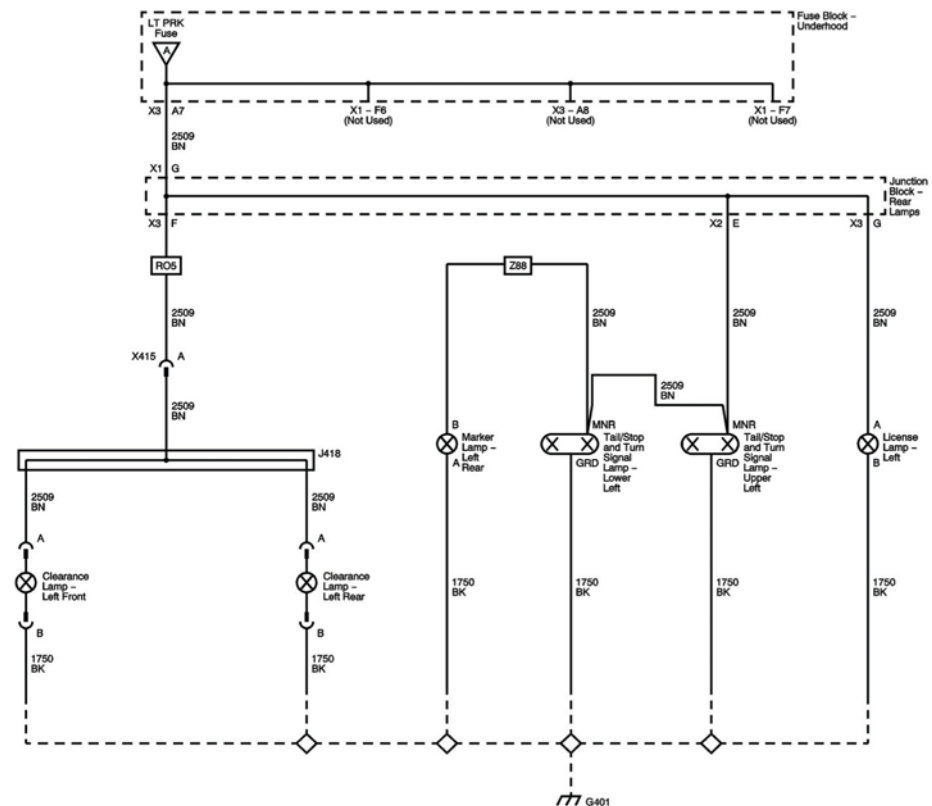
## Special Applications – Schematics – Rear Lamps – Chassis Cab and Box Delete (ZW9) Trucks

### Right Rear Park Lamps



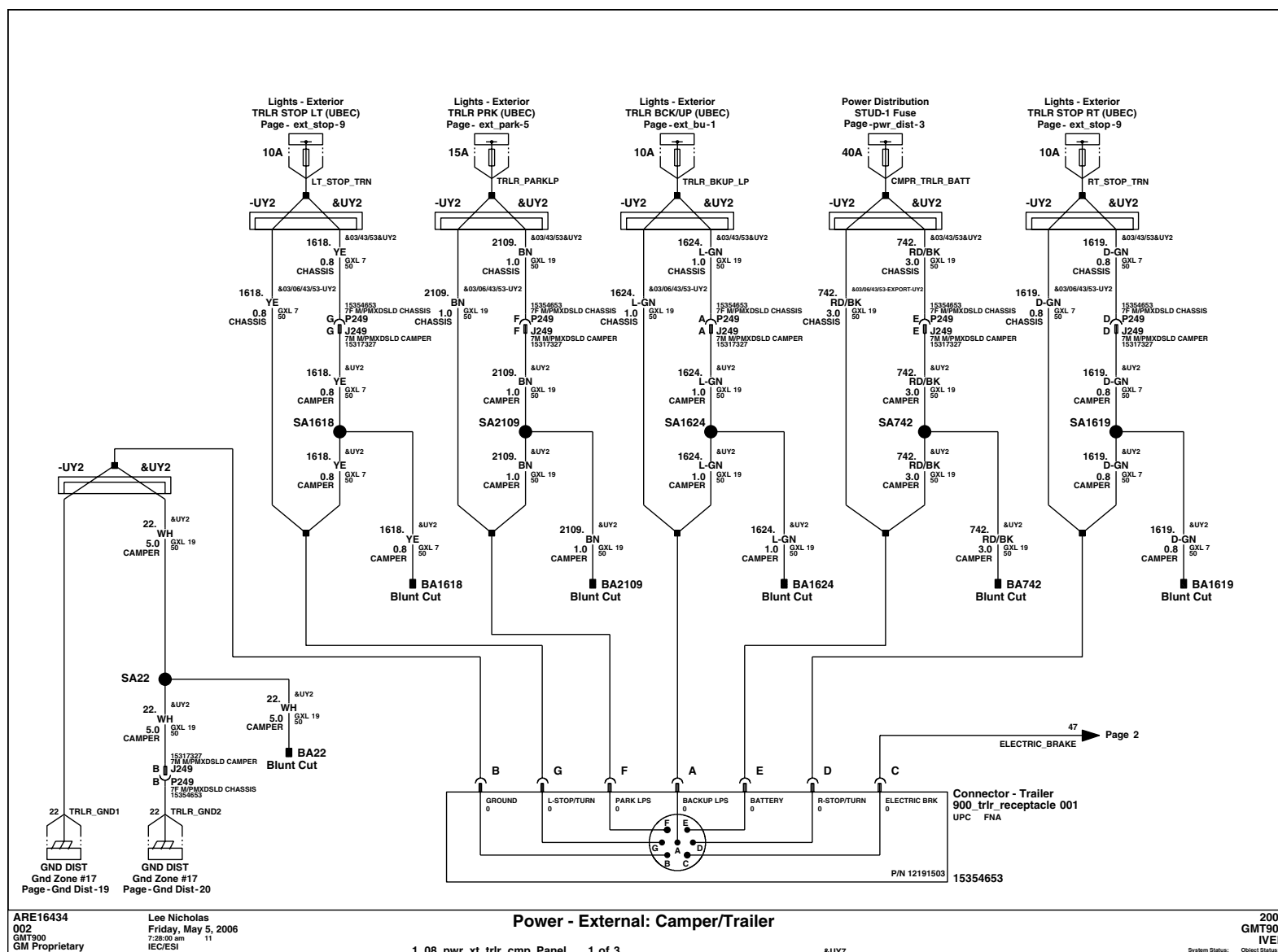
#1914947

### Left Rear Park Lamps



#1914940

## **Special Applications – Schematics – Trailer – Chassis Cab and Box Delete (ZW9) Trucks**



## Special Applications – Junction Block Connector X1 – Chassis Cab and Box Delete (ZW9) Trucks

### Junction Block - Rear Lamps - X1 Connector Part Information

- OEM: 15317304
- Service: 15306114
- Description: 8-way F GT 280 Sealed (BU)

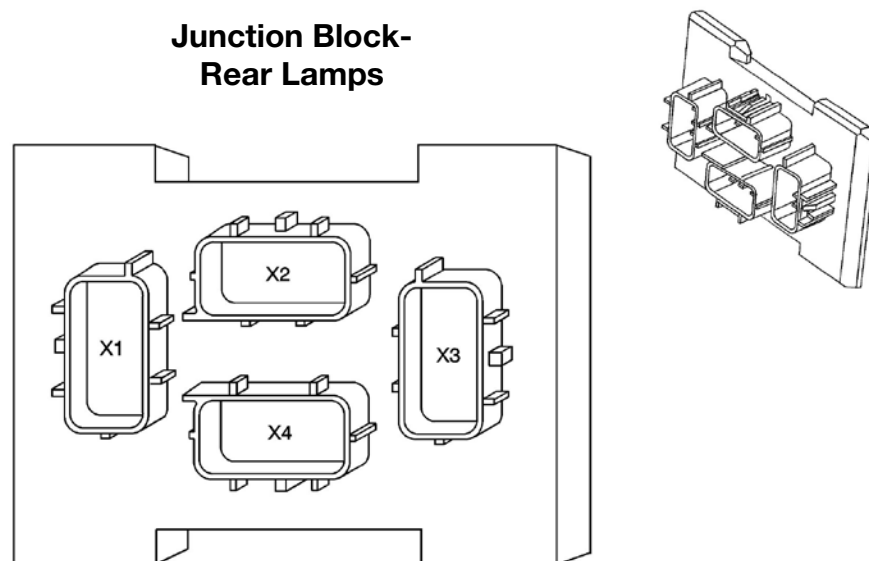
#### Terminal Part Information

- |                                                        |                                                        |
|--------------------------------------------------------|--------------------------------------------------------|
| • Pins: A, C, D, G, H                                  | • Pins: B, E                                           |
| • Terminal/Tray: 15304716/8                            | • Terminal/Tray: 15304717/8                            |
| • Core/Insulation Crimp: 2/1                           | • Core/Insulation Crimp: 4/1                           |
| • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) | • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) |

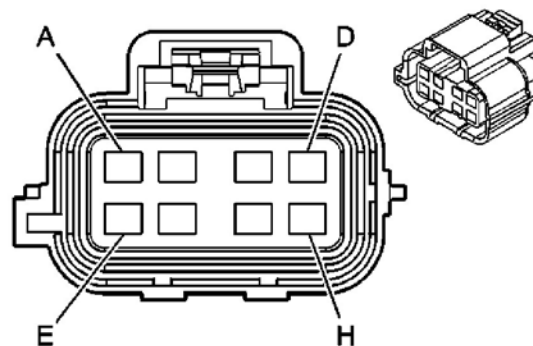
#### Junction Block - Rear Lamps, X1

| Pin | Wire Color | Circuit No. | Function                                 |
|-----|------------|-------------|------------------------------------------|
| A   | 0.5 YE     | 18          | Left Rear Stop/Turn Lamp Supply Voltage  |
| B   | 2 BK       | 2150        | Ground                                   |
| C   | 0.8 L-GN   | 24          | Backup Lamp Supply Voltage               |
| D   | 0.5 BN     | 2609        | Right Rear Park Lamps Supply Voltage     |
| E   | 2 BK       | 1750        | Ground                                   |
| F   | --         | --          | Not Used                                 |
| G   | 0.8 BN     | 2509        | Left Rear Park Lamp Supply Voltage       |
| H   | 0.5 D-GN   | 19          | Right Rear Stop/Turn Lamp Supply Voltage |

### Junction Block- Rear Lamps



### Junction Block- Rear Lamps X1



## Special Applications – Junction Block Connectors X2 & X3 – Chassis Cab and Box Delete (ZW9) Trucks

### Junction Block - Rear Lamps - X2 Connector Part Information

- OEM: 15317305
- Service: 15306338
- Description: 8-way F GT 280 Sealed (GY)

#### Terminal Part Information

- |                                                        |                                                        |
|--------------------------------------------------------|--------------------------------------------------------|
| • Pins: A, C, D, G, H                                  | • Pins: B, E                                           |
| • Terminal/Tray: 15304716/8                            | • Terminal/Tray: 15304717/8                            |
| • Core/Insulation Crimp: 2/1                           | • Core/Insulation Crimp: 4/1                           |
| • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) | • Release Tool/Test Probe:<br>15315247/J-35616-4A (PU) |

| Junction Block - Rear Lamps, X2 |            |             |                                            |
|---------------------------------|------------|-------------|--------------------------------------------|
| Pin                             | Wire Color | Circuit No. | Function                                   |
| A-B                             | --         | --          | Not                                        |
| C                               | 0.8 BK     | 1750        | Ground                                     |
| D                               | --         | --          | Not Used                                   |
| E                               | 0.8 BN     | 2509        | Left Rear Park Lamps<br>Supply Voltage     |
| F                               | 0.8 L-GN   | 24          | Backup Lamp Supply Voltage                 |
| G                               | --         | --          | Not Used                                   |
| G                               | 0.8 BN     | 2509        | Left Rear Park Lamp<br>Supply Voltage      |
| H                               | 0.8 YE     | 18          | Left Rear Stop/Turn Lamp<br>Supply Voltage |

### Junction Block - Rear Lamps - X3 Connector Part Information

- OEM: 15317308
- Service: 15306135
- Description: 8-way F GT 280 Sealed 5.2 (BN)

#### Terminal Part Information

- Terminal/Tray: 15304716/8
- Core/Insulation Crimp: E/1
- Release Tool/Test Probe:  
15315247/J-35616-4A (PU)

| Junction Block - Rear Lamps, X3 |            |             |                                               |
|---------------------------------|------------|-------------|-----------------------------------------------|
| Pin                             | Wire Color | Circuit No. | Function                                      |
| A                               | 0.5 BN     | 2609        | Right Rear Park Lamps<br>Supply Voltage       |
| B                               | 0.5 BN     | 2609        | Right Rear Park Lamps<br>Supply Voltage (R05) |
| C                               | 0.5 BK     | 1750        | Ground (R05)                                  |
| D                               | 0.5 BK     | 1750        | Ground (R05)                                  |
| E                               | 0.5 BK     | 1750        | Ground                                        |
| F                               | 0.5 BN     | 2509        | Left Rear Park Lamps<br>Supply Voltage (R05)  |
| G                               | 0.5 BN     | 2509        | Left Rear Park Lamps<br>Supply Voltage        |
| H                               | 0.5 BK     | 1750        | Ground                                        |

## Special Applications – Junction Block Connector X4 – Chassis Cab and Box Delete (ZW9) Trucks

### Junction Block - Rear Lamps - X4 Connector Part Information

- OEM: 15317306
- Service: 15306339
- Description: 8-way F GT 280 Sealed 5.2 (BK)

#### Terminal Part Information

- Terminal/Tray: 15304716/8
- Core/Insulation Crimp: E/1
- Release Tool/Test Probe:  
15315247/J-35616-4A (PU)

| Junction Block - Rear Lamps, X4 |            |             |                                             |
|---------------------------------|------------|-------------|---------------------------------------------|
| Pin                             | Wire Color | Circuit No. | Function                                    |
| A                               | 0.8 BK     | 2150        | Ground                                      |
| B                               | 0.8 BN     | 2609        | Right Rear Park Lamps<br>Supply Voltage     |
| C-D                             | --         | --          | Not Used                                    |
| E                               | 0.8 L-GN   | 24          | Backup Lamp Supply Voltage                  |
| F                               | 0.8 D-GN   | 19          | Right Rear Stop/Turn Lamp<br>Supply Voltage |
| G-H                             | --         | --          | Not Used                                    |

## Installation of Aftermarket Accessories – Battery, Ignition and Ground Feeds

### DO NOT SPLICE INTO WIRING HARNESS



#### Applicable to GM Models:

2007-2009 Cadillac Escalade, Escalade ESV, Escalade EXT

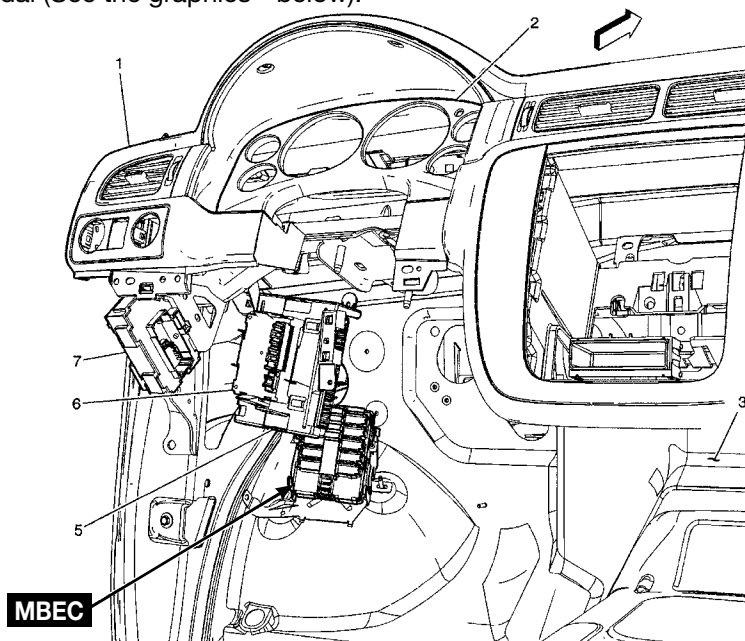
2007-2009 Chevrolet Avalanche, Silverado, Suburban & Tahoe

2007-2009 GMC Sierra, Sierra Denali, Yukon, Yukon Denali & Yukon XL

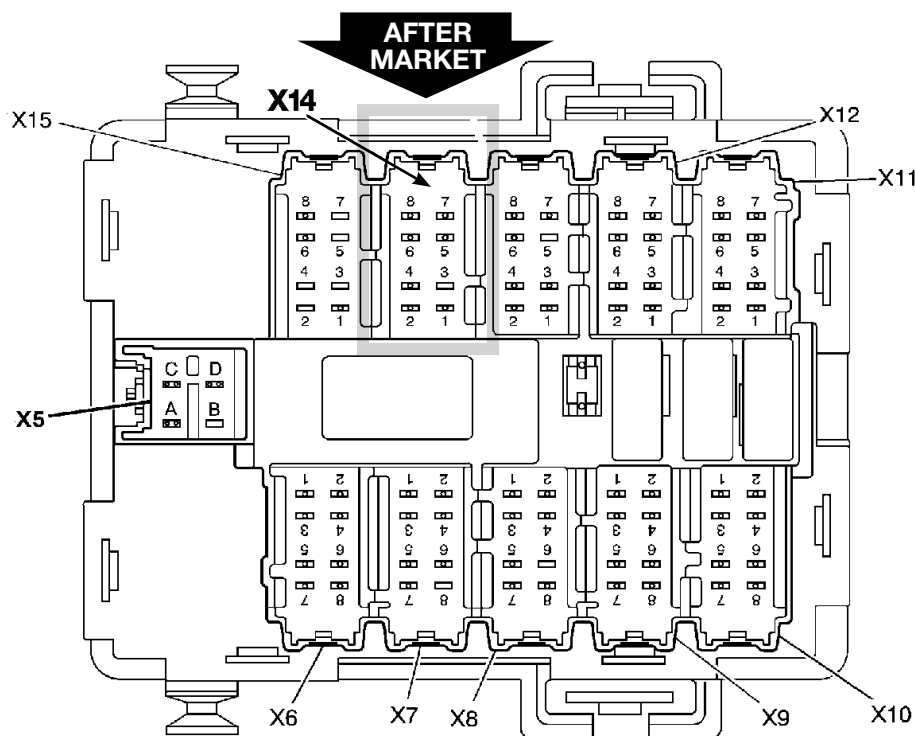
There are two different areas on a fullsize truck or utility vehicle where power and grounds can be acquired without having to splice or cut into the existing wiring. One is the MBEC and the other is the UBEC.

#### MBEC – Mid-Bussed Electrical Connector

The MBEC is located below the instrument panel to the left of the brake pedal (See the graphics - below).



The MBEC has 10 positions for connecting electrical connectors. One of these positions is designated for aftermarket utilization. Install connector (P/N 20791502) into the open position (X14 identified by the arrow in the following graphic).



Within this connector, there is a fused 30 Amp battery feed, a fused 15 Amp battery feed, a fused 10 Amp Run/Crank feed, a 300 milliamp RAP (Retained Accessory Power) feed and a ground.

(continued on next page)

From GM Bulletin - Document ID: 2204033 / #08-08-45-004 (Oct. 28, 2008)

## Installation of Aftermarket Accessories – Battery, Ignition and Ground Feeds (cont'd)

**Important:** Connector (P/N 20791502) comes with one wire lead installed. This lead will need to be removed before the connector is pinned for use with aftermarket electrical devices.

The pin out of the connector is as follows:

| Cavity | Circuit Description | Circuit Number | Fuse Size     |
|--------|---------------------|----------------|---------------|
| 1      | Ground              | 1050           | N/A           |
| 2      | Battery Feed        | 4540           | 15 Amps       |
| 3      | Not Used            | --             | --            |
| 4      | Not Used            | --             | --            |
| 5      | Battery Feed        | 2340           | 30 Amps       |
| 6      | Not Used            | --             | --            |
| 7      | Run/Crank Feed      | 739            | 10 Amps       |
| 8      | RAP Feed            | 43             | 300 milliamps |

### Wire Gauge Selection

For any of these powered connections to be used, Circuit Protection Guidelines must be followed to assure that the circuit gauge is selected appropriately so that it will be protected by the fuse in case of a short circuit.

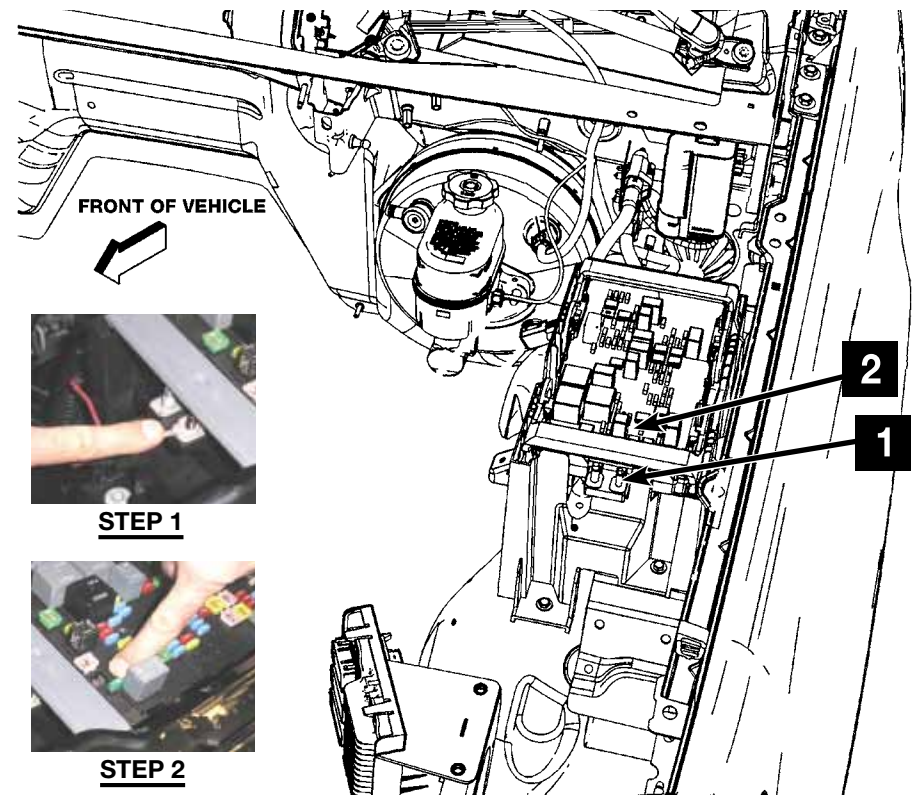
Information in GM bulletins is intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



### UBEC – Underhood Bussed Electrical Connector

On vehicles not equipped with an Auxiliary Battery (Auxiliary Battery RPO TP2), there is a stud that could be used for a fused battery feed at the UBEC. The UBEC is located on the left side of the engine compartment (refer to graphic below).

#### Connecting Aftermarket Electrical Devices On Vehicles Not Equipped With TP2



#### Important:

(Step 1) The smaller of the two studs (#1 in diagram and photo) provides a fused battery feed. Secure The terminal to stud with an M6 fastener.

(Step 2) Insert a 40-Amp, J-case fuse (#2 in diagram and photo) to power the circuit.